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The study of *Health Status of Military Women and Men in the Total Force* will obtain comprehensive probability-based epidemiological data for women and men across all pay grades for active-duty Army, Air Force, and Guard/Reserve components. These data will be combined when possible with comparable data from a Naval Health Research Center survey of active-duty Navy and Marine Corps personnel to form a comprehensive dataset for the Total Force.

The second year of the project has been devoted to finalizing the questionnaire, and making necessary preparations to begin the field work. The latter has consisted of obtaining military letters of support, meeting with the study's advisory group, selecting the study sample, planning the data collection methodology, and beginning data collection. Other activities, such as preparing publicity for the survey, have also taken place.

In addition to discussion of the past year's activities, this report also notes research plans for Year 3.

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FOREWORD

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Robert M Gray *10/29/98*
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HEALTH STATUS OF MILITARY WOMEN AND MEN IN THE TOTAL FORCE

YEAR 2 ANNUAL REPORT

1.0 Introduction

The military has undergone considerable change over the past two decades. One notable change is an increasing number of women in the military and corresponding expanded roles for them. A recent major change has been the lifting of the combat exclusion rule beginning in 1993 and amplified in 1994 that has resulted in the opening of large numbers of military positions that were previously closed to women. Further, the Services are being held accountable to Congress on their progress of integrating women into newly opened positions. These actions have considerably increased the opportunities for women to serve in the military and to advance in their careers. Despite efforts to reduce the size of the active duty force, the percentage of women serving on active duty is increasing, as is the age and ethnic diversity of this population.

Such changes require the development of baseline data to monitor changes in health status and health care delivery needs within the Department of Defense. Much prior research on health issues has focused generally on military men and on the active-duty Services of the Military. Consequently, broad-based epidemiological data about military women are lacking, and no comprehensive health status data are available across all components of the Total Force. The present investigation will provide, for the first time, probability-based epidemiological data on women's and men's health status for the Total Force, encompassing personnel serving in the Active Military and in the Reserve Components.

This project builds on a recent study (Perceptions of Wellness and Readiness [POWR]) conducted jointly by the Naval Health Research Center (NHRC) and Research Triangle Institute (RTI) of active-duty Navy and Marine Corps personnel. Specifically, it expands the target population of the POWR study to encompass the active-duty Army and Air Force and the full set of Reserve components (Army National Guard, Army Reserve, Naval Reserve, Marine Corps Reserve, Air National Guard, Air Force Reserve). Information from the two surveys will be combined (to the extent permitted by common questionnaire items for the respective studies) to yield broad-based epidemiological data on women's and men's health status for the Total Force.

In addition to analyzing the wide array of resulting military data, the study also will compare military data with civilian data from selected civilian surveys, such as the National Health Interview Survey (NHIS) and the National Health and Nutrition Examination Survey

(NHANES). All analyses, of course, will be subject to constraints of available resources. Military data will represent women and men across all pay grades throughout the world, and results will be generalizable to women and men in all components of the Armed Forces. Civilian data will represent women and men throughout the Nation.

This report describes progress on the Total Force Study during Year 2 and plans for the project during Year 3.

1.1 Objectives

The overriding aim of the Total Force Study is to provide comprehensive broad-based epidemiological data on the health status of women and men in all components of the Total Force, both Active and Reserve Components. To achieve this aim, the design, analyses, and reporting of the research will be guided by four broad objectives:

- Examine the health status of military women and men in six general areas: reproductive health, medical history and nutritional status, mental health, lifestyle factors, occupational/environmental risks and stressors, and use of health services.
- Examine the effects of military women's and men's physical health conditions or emotional problems on military work.
- Examine the impact of military service on the health status of military women and men.
- Examine factors associated with health care utilization, satisfaction, and access to health services.

These findings will have high significance to the Military in general and military women in particular because they will for the first time provide broad-based data for the Total Force that have important implications for readiness. More specifically, they will (a) provide baseline epidemiological data on a wide range of health problems, risk factors, and health care needs and practices; (b) classify subgroups of women and men within and across Active and Reserve components who are most at risk of experiencing health problems; (c) suggest areas where health promotion and other interventions can be targeted to improve military women's and men's health; (d) compare health data for military and civilian populations, and (e) specify gaps in understanding that are in need of further study.

1.2 Background

The shift in the U.S. Military from a conscription-based to an all-volunteer force in 1973, along with increased social acceptance of women's involvement in traditionally male-dominated occupations, has created new opportunities for an increasing number of women in the Military. In the early 1980s, less than 10% of the Armed Forces were women,^{1,2} but by 1995 that percentage was approximately 14% of the force for a total of nearly 200,000 women.³

Although women in the U.S. Military have traditionally tended to be in administrative support or health-related occupational specialties, such as nursing, all occupations in principle are open to women except those related to direct offensive ground combat.⁴⁻⁶ In the Persian Gulf War, however, approximately 33,000 women served in combat-support roles, including airplane and helicopter pilots, construction and repair, and artillery direction.⁷

In addition to safety concerns for women who might be near direct combat operations, the Persian Gulf War and other events have raised concerns about the potential impact of military service upon women's health. These include the risk of stress-related health problems associated with minority status in a predominantly male environment, the risk of reproductive hazards associated with exposure to hazardous materials, or the risk of injury if women are in more physically demanding occupational specialties as opposed to administrative or medical specialties. Similarly, concern has also been raised about the potential impact of women's health problems upon overall military readiness.⁴

Partly in reflection of the large proportion of males in the Military, however, much prior research on the health of military personnel has either involved all-male samples within individual Services,⁸⁻¹¹ or it has included both military women and men but has generally not provided gender-specific estimates.^{12,13} Prior health-related studies that have been conducted among military women, such as the 1989 DoD Women's Health Survey,¹⁴ the 1992 Navy Personnel Research and Development Center (NPRDC) survey of pregnancy among enlisted women, and Hoiberg and White's study of hospitalizations among Navy women,⁴ have tended to focus on a narrow aspect of military women's health issues (e.g., pregnancy, hospitalizations) or have not allowed estimation of baseline disease prevalence rates.

In addition, military population surveys do not offer the same degree of detailed epidemiological data on health status and health behaviors as are available for the civilian population through such studies as the National Health and Nutrition Examination Survey (NHANES),¹⁵⁻¹⁷ the National Health Interview Survey (NHIS),¹⁸ the Behavioral Risk Factor Surveillance System (BRFSS),¹⁹ and the Epidemiological Catchment Area (ECA) study.²⁰ Five

recent DoD-wide surveys have provided some population-based health data on active-duty members: the 1992 Worldwide Survey of Substance Abuse and Health Behaviors Among Military Personnel,²¹ the 1992 DoD Survey of Military Medical Care Beneficiaries,²² the 1989 DoD Women's Health Survey,¹⁴ the 1995 DoD Survey of Health Related Behaviors Among Military Personnel²³ and the 1994-95 health care survey of DoD beneficiaries.

Unfortunately, none of these studies allows extensive estimation of baseline disease prevalence rates or provides comprehensive data about nutritional status, mental status, exposure to trauma/environmental hazards, reproductive history, stressors, or lifestyle factors. Additional research is needed to better assess these issues and their impact on the use of health services and on the readiness of military women.

Studies of health service utilization of military women have found that military women are more likely to use health services than military men, a finding consistent with research in the civilian population.²⁴⁻²⁶ Nice and Hilton found that Navy shipboard women used health care resources at a significantly higher rate than did men, with a female-to-male visit ratio of 1.44 for all visits and 1.21 when all sex-specific diagnoses were excluded.²⁷ Similarly, a study of the health status of women in the Army demonstrated that Army women used health care resources more frequently than Army men did.²⁸ In addition, Navy enlisted women have considerably higher rates of hospitalization than do enlisted men, with pregnancy-related conditions accounting for nearly one-third of women's hospitalizations.²⁹

In one study of enlisted Navy men and women, mental disorders were the second leading cause for hospitalization, after injuries for men, and after pregnancy-related conditions for women.²⁹ However, a study of sex differences in sick call diagnoses aboard U.S. Navy ships found significantly higher rates of personality disorder, stress, and adjustment reactions, and other symptoms and syndromes (e.g., eating and sleep disorders) among women.³⁰ Also, women soldiers deployed during the Persian Gulf War were almost twice as likely as men to be diagnosed with psychiatric disorders.³¹ However, these higher rates may reflect women's greater propensity to use health services, as noted above. Further, most studies have not controlled for known demographic, psychosocial, or Service-related differences between the sexes in the assessment of their disorder rates. More definitive data are needed to understand the extent of mental disorders and the need for additional prevention and/or intervention services.

Reproductive issues are of major concern not only for policy purposes (e.g., manning ships and staffing combat positions), but also for specialized health care. An NHRC study found that age-specific birth rates for Navy enlisted women were 10% to 50% less than for civilians.³² The same study also reported that active-duty enlisted Navy women had an ectopic pregnancy

rate twice that of civilian women. However, baseline information on known risk factors (e.g., lifestyle, reproductive history, and history of sexually transmitted diseases [STDs]) for adverse reproductive outcomes was not available. Therefore, adequate inferences could not be made about the high rate of ectopic pregnancies in enlisted Navy women.

Findings from these studies might suggest that stressors associated with being a woman in the Military or exposure to hazardous materials could be adversely affecting the health of military women. However, many of these studies have focused on only one Service (e.g., the Navy), have not taken into account risk factors that could explain differences between military women and men, or have not collected sufficient baseline information to examine relationships between a particular risk factor (e.g., exposure to hazardous chemicals) and health outcomes. To better understand and evaluate the effect of an expanded role for women, a clear understanding of health, lifestyle, and fitness variables must be ascertained to serve as a basis for subsequent comparisons.

This study attempts to address a number of these gaps in information by generating baseline information related to six general health issue areas: (a) reproductive health, (b) medical history and nutritional status, (c) mental health, (d) lifestyle factors, (e) occupational/environmental risks and stressors, and (f) use of health services. When combined with data from the POWR survey of active-duty Navy and Marine Corps personnel, this research will provide important baseline information on the health status of military women and men in the Total Force, including the Reserve components.

The results of this study will provide the means to examine women's health status in the Total Force, an issue of considerable importance as the demographic profile of the Military changes over the next few years and as women move into occupations that have traditionally been dominated by men. In addition, some information will be collected using methodology and measures similar to those used in national civilian surveys and, therefore, will be comparable to civilian population data. Taken together, findings from this research can reaffirm or guide current policies on occupation and medical care in the Military, particularly with regard to issues reflecting the health of military women.

2.0 Year 2 Activities

The second year of the project has been devoted to finalizing the questionnaire, and making necessary preparations to begin the field work. The latter has consisted of obtaining military letters of support, meeting with the study's advisory group, selecting the study sample, planning the data collection methodology, and beginning data collection. Other activities, such

as preparing publicity for the survey, have also taken place. This section provides details about the work accomplished.

2.1 Finalizing the Questionnaire and Obtaining Letters of Support

Based on the results of our pilot testing conducted in Year 1, the questionnaire content was revised and finalized in conjunction with the study team and military advisors. Final formatting for a mark-reflex instrument capable of being optically scanned was completed and checked and the questionnaire was color-printed. Application was also made to the Army Research Institute (ARI) for a Survey Control Number (SCN) and a Report Control Symbol (RCS) for the study to give it official clearance status so it could be conducted among military personnel. After addressing all of the concerns of the ARI committee, approval was granted and the resulting SCN and RCS numbers were obtained. They were printed on the front page of the survey instrument. A copy of the final questionnaire for the Total Force Health Assessment appears in Appendix A.

To accompany the questionnaire in the mail, a cover letter on RTI letterhead was developed, containing basic informed consent information for the sampled members, as well as contact names and telephone numbers of RTI staff available to answer any questions regarding the survey. The content of this cover letter was carefully reviewed to be sure it met all requirements to ensure the protection of Human Subjects. It was formally approved by the RTI Institutional Review Board (IRB). A copy of this cover letter appears in Appendix B.

Additionally, to provide credibility to the study for sampled members, letters of support were requested from the various branches of the military participating in the study. Members of the study Advisory Group were active in briefing the study to their Services and working to obtain signatures from key military leaders. The process for obtaining these letters turned out to be very lengthy and spanned a period of over six months. Ultimately six different letters were obtained from the following to cover the range of participating Services:

- Lieutenant General Charles Roadman, USAF Surgeon General, and Major General Robert McIntosh, Chief of Air Force Reserve
- Rear Admiral G.D. Vaughan, US Naval Reserve
- Major General Roger Schultz, Director, Army National Guard
- Brigadier General James Helmly, Deputy Chief, Army Reserve
- Lieutenant General Ronald Blanck, US Army Surgeon General

- Rear Admiral John Weed, US Naval Reserve Force Surgeon, and Major General David Mize, Commander, Marine Forces Reserve.

Copies of these letters appear in Appendix C.

2.2 Advisory Group Meetings

At the beginning of the Total Force Study, an advisory group was formed with representatives from all services slated to take part in the study. Advisory group meetings have been held periodically since the project's beginning with project staff and advisory group members. Throughout the study, advisory group members have made significant contributions to the development of the questionnaire and key decisions about the research methods. They also have been invaluable in building support for the study among their Service components.

The military advisory group consists of representatives from:

- U.S. Army Center for Health Promotion and Preventive Medicine;
- U.S. Army Medical Research and Materiel Command;
- U.S. Army National Guard Readiness Center;
- Office of the Chief of the Army Reserve;
- Office of the Secretary of Defense, Reserve Affairs;
- U.S. Naval Reserve Health Care Programs Branch;
- U.S. Navy Bureau of Medicine and Surgery;
- Headquarters, U.S. Marine Corps;
- Headquarters, Air Force Medical Operation Agency, Office of the Surgeon General;
- Air Force Office for Prevention and Health Services Assessment; and
- Office of the Assistant Secretary of Defense, Health Affairs.

During Year 2, the study team held one meeting in January at the RTI-Washington, DC office with the study's military advisory group. Items discussed at that meeting included the final questionnaire; the advantages and feasibility of group sessions versus a mailout as the planned study methodology; scheduling concerns and issues for data collection; the need for military-

specific letters of support; and publicity for the survey. Key decisions reached at the meeting were the following:

- to adopt a mail methodology for the study because of the difficult and time-consuming task and associated expense that would be required to gain support to do group sessions on base;
- to pursue efforts to obtain letters of support from high-ranking military officers for each of the service components taking part in the study;
- to delay the data collection until the fall of 1998 to provide sufficient time to obtain letters of support and to avoid a conflict with another large-scale study being fielded under the sponsorship of DoD Health Affairs during the spring--the 1998 Survey of Health Related Behaviors Among Military Personnel; and
- to pursue efforts to obtain publicity for the survey by preparing a press release that could be sent to military newspapers (e.g., *Army Times*), and/or included in local news letters or home town newspapers.

The goal was to complete key aspects on all of these tasks such that the sample could be selected in the early summer of 1998 and data collection could begin in the fall.

2.3 Sample Design

The sample for the Total Force Study was selected using a stratified random sampling design. Source information for constructing the sampling frame consisted of person-level records from the Active Duty Master File (ADMF) and the Reserve Components Common Personnel Data System (RCCPDS), current for May 1998. The source information was provided by the Defense Manpower Data Center (DMDC). The May date was chosen to provide current information, while allowing sufficient time to develop the sampling design, select the sample, and begin data collection operations in September 1998.

Key reporting domains were identified to form the basis of the design. A total of 66 domains were defined, based on

- gender;
- Service (active Army, active Air Force, Naval Reserve, Marine Corps Reserve, Army National Guard and Army Reserve [combined], and Air National Guard and Air Force Reserve [combined]);

- pay grade group (junior enlisted, senior enlisted, warrant officers, company grade officers and field grade officers);
- race/ethnicity (non-Hispanic White, non-Hispanic Black, Hispanic, American Indian and Alaskan Native [combined], Asian and Pacific Islander [combined] and “other” race/ethnicity); and
- location (Continental United States [CONUS], outside CONUS or OCONUS).

Using essentially these same variables, a total of 162 strata were constructed, to control the distribution of the sample with respect to the identified key domains.

For design purposes, the objectives of the survey can be stated in terms of determining the total sample size and allocation (to the strata) that will satisfy precision constraints imposed on each of the domains. To this end, equations were developed that described the variable survey cost (i.e., that part of the total cost that depends on the sample size and allocation) and the variances associated with parameter estimates describing each domain. The precision requirements take the form of specifying the maximum value of the sampling variances to be associated with each parameter estimate. For design purposes, the parameters were taken to be domain proportions or prevalence rates. To specify the domain-level precision constraints, both the value of the domain proportion and the maximum value of the variances are specified.

Features of the design (e.g., stratum sizes) are constants in the cost and variance equations and the numbers of observations to be selected from within each stratum are the unknowns. The cost equation is minimized subject to the constraints placed on the variances. Sufficient conditions for the allocation solutions to exist are provided if the cost model is a convex function and the constraints are individually concave functions. The necessary conditions are the familiar Karush-Kuhn-Tucker conditions. A reference to the procedure can be found in Mason, et al. (1995).³³

The allocation solutions were obtained setting the domain proportions or prevalence rates equal to 0.10 for each of the domains and requiring a confidence interval half-width of not greater than 0.034 for most of the domains. Stricter precision requirements were set for larger domains (e.g., a confidence interval half-width of 0.02 for total females). To obtain a total sample size in keeping with the data collection budget for this work, precision requirements were removed (i.e., confidence interval half-widths set to 100 percent of the specified domain proportion) for some very small domains (e.g., female warrant officers, representing only 0.09 percent of the inferential population). Those constraints found to drive the allocation solutions were those imposed on females in the Marine Corps Reserve and the American Indian-Alaskan Native race ethnicity group.

The allocation solutions, of course, provide a disproportionate allocation of the total sample, depending on the distribution of the identified key domains in each of the design strata, the stratum sizes overall, the specified domain-level precision constraints, and the variable survey costs in each of the strata. Over the entire design, a minimum of 22,325 observations is required to jointly satisfy the imposed constraints.

The allocation solutions are necessarily inflated to compensate for the expected response rates. Experience with surveys of military personnel has shown that response rates depend on a variety of factors in addition to the subject matter concerns and complexity of the questionnaire, including gender, Service, pay grade, and race/ethnicity, factors which coincidentally were used in constructing the strata. The expected response rate for each of the design strata was determined based on recent past experience, and ranges from a low of 18 percent (Marine Corps Reserve, junior enlisted, non-Hispanic Black males) to a high of 75 percent (Active Air Force, Warrant and Company Grade Officers, Hispanic, American Indian-Alaskan Native, Asian - Pacific Islander males). The total of 22,325 observations is expected to be obtained with a total sample size of 47,990 individuals given the actual distribution of the sample.

The generally low response rate and its uneven distribution will demand careful consideration of the non-response compensation procedure to be used in association with analyzing the data. Current plans are to use weighting class adjustments and post-stratification adjustments, using the strata to define the weighting classes and the post-strata. However, should the obtained response patterns necessitate collapsing some of the initially constructed classes, consideration will be given to inverse response propensity weighting in place of weighting class adjustments. The two procedures will give the same results provided that the response propensity model includes variables that define the design strata. However, the response propensity procedure has superior properties when weighting classes are collapsed. Because the model includes main effects (i.e., defined by the stratification variables considered individually), the full sample distributions with respect to the corresponding variables are reproduced following the adjustment (which is not the case for weighting class adjustments when some of the classes are collapsed).

Further, depending on the availability of information for the purpose, the modeling approach allows the inclusion of terms related to differences in the response variable values between respondents and non-respondents. Weighting classes, on the other hand, assume that the averages of the response variable values for respondents and non-respondents are the same within classes.

2.4 Data Collection

During Year 2, data collection plans were finalized and data collection for the main study began in September 1998 for all participating components. As noted above, we had a number of discussions with the Advisory Group members to assess the feasibility of conducting group survey administration sessions. The reason for wanting to use this approach was past experience showing that it resulted in a higher response rate. Despite the advantages of this approach, it was determined not to be feasible to use this methodology for the Reserve Components because of their very limited duty time and heavy commitments at their monthly meetings. Although it was more feasible for the active component, it was not possible to obtain the necessary permissions and support during the time frame and within the budget we had available. Consequently, it was decided the survey would be conducted entirely through a mail methodology, although we realized this had the potential to negatively affect response rates.

For the mail methodology, we have adapted the Total Design Method recommended by Dillman,^{34,35} which involves mailing an initial questionnaire packet followed by a “reminder/thank you” postcard. The first mailing for the study occurred in September 1998 and consisted of a package that had a letter from a military official encouraging support for the study, a letter of consent and instructions, the questionnaire, and a return envelope. The initial mailing was followed two weeks later by the mailing of a reminder postcard and was sent to the following selected personnel, according to Service component:

Service Component	Frequency	Percent	Cumulative	
			Frequency	Percent
Active Army	12,929	27.0	12,929	27.0
Active Air Force	6,779	14.1	19,708	41.1
Army National Guard	6,920	14.4	26,628	55.5
Army Reserve	6,054	12.6	32,682	68.1
Naval Reserve	4,675	9.7	37,357	77.9
Marine Corps Reserve	3,841	8.0	41,198	85.9
Air National Guard	4,015	8.4	45,213	94.2
Air Force Reserve	2,761	5.8	47,974	100.0

The second mailing is planned for mid November and will be similar to the first mailing except it will contain a revised cover letter and will be sent to nonrespondents only. Dillman suggests a telephone follow-up as a possible alternative to a third mailing, and we are considering performing a telephone non-response follow-up on a subsample of non-responders, in lieu of a third mailing. We requested and received from DMDC the home/billeting telephone numbers for the majority of selected personnel.

Over the past year, working with our scoring contractor, National Computer Systems (NCS), we developed a means of maintaining the respondent's anonymity but, at the same time, tracking who has returned a questionnaire. This is essential to minimize costs associated with follow-up mailings by limiting them to nonrespondents only. To ensure that a respondent's data cannot be linked to his/her name and address, the questionnaire is anonymous and contains no personally identifying information. Questionnaires sent to respondents in the mail have an identification number printed on the postage-paid return envelope that accompanies each questionnaire. When a completed questionnaire is received by NCS, the instrument is immediately separated from the envelope in which it came, and the identification number on the outside of the envelope is keyed into a data file. The identification number is kept entirely separate from the respondent's data and is only maintained for the purpose of limiting second and third mailings to nonrespondents. Completed questionnaires will be optically scanned by NCS.

2.5 Study Clearances

As with all ongoing RTI studies involving human subjects, the RTI Institutional Review Board (IRB) has reviewed the study and approved it for field data collection. The RTI IRB will re-review the project at yearly intervals as long as it continues. The study also was reviewed and approved by the Department of the Army Human Use Review and Regulatory Affairs Division and the ARI .

2.6 Study Publicity

The RTI Communications Office drafted a press release to inform members of the military about the survey and answer what we anticipated would be commonly asked questions about the study. Beginning in August 1998, this information began appearing in military publications produced for the Active Duty, Reserve, and Guard communities, such as *Army Times*, the *National Guard Magazine*, etc. A copy of the press release is attached in Appendix D.

3.0 Summary and Conclusions

To summarize, the following key activities were accomplished in Year 2:

- An advisory group from all participating components met early in 1998 to review aspects of study progress.
- The questionnaire was finalized and printed.
- Study clearances, including IRB approvals, were obtained.
- Letters of support for the survey were obtained from participating branches of the military.
- The sampling plan was finalized, and a sample of 47,990 respondents was selected.
- Data collection methodology was finalized and data collection began in September 1998.

Year 3 will see data collection continue during the first part of the year with an anticipated completion in February 1999. Following data collection, the questionnaires will be optically scanned and a raw data file produced. Editing of the file will commence along with plans for weighting the data. Once these tasks are completed, analyses and reporting will be conducted.

References

1. Burt MA, Biegel MM, Carnes Y, Farley EC. *Worldwide Survey of Non-medical Drug Use and Alcohol Use Among Military Personnel: 1980*. Bethesda, MD, Burt Associates, Inc, 1980.
2. Bray RM, Guess LL, Mason RE, Hubbard RL, Smith DG, Marsden ME, Rachal JV. *1982 Worldwide Survey of Alcohol and Non-medical Drug Use Among Military Personnel (RTI/2317/01-01F)*. Research Triangle Park, NC, Research Triangle Institute, 1983.
3. Institute of Medicine. *Recommendations for Research on the Health of Military Women (Committee on Defense Women's Health Research)*. Washington, DC, National Academy Press, 1995.
4. Hoiberg A, White JF. Health status of women in the armed forces. In: Stanley J, Blair JD (eds), *Challenges in Military Health Care*. New Brunswick, NJ, Transaction Publishers, 1993:pp. 73-92.
5. Naylor SD, Walker PV. Army makes new rules for women. *Army Times* 1994, August 8, pp. 3, 13.
6. Stanley SC, Segal MW. Women in NATO: An update. *Armed Forces & Society* 1988; 14:559-85.
7. Becraft C. Women in the U.S. armed services: The war in the Persian Gulf. *Women and Criminal Justice* 1992;4(1):155-63.
8. Abood DA, Conway, TL. *Smoking Status and Body Composition, Exercise, Dietary Intake, and Alcohol/Caffeine Consumption (Report No. 91-22)*. San Diego, Naval Health Research Center, 1991.
9. Hurtado SL, Conway TL. *Changes in Smoking Behavior Following a Strict No-smoking Policy in U.S. Navy Recruit Training (Report No. 93-17)*. San Diego, Naval Health Research Center, 1993.
10. McCarthy J, Griffith P, Prusaczyk WK, Goforth HW, Vailas A. *Combined Strength and Endurance Training: Functional and Morphological Adaptations to Ten Weeks of Training (Report No. 92-26)*. San Diego, Naval Health Research Center, 1992.
11. Pleas J. *Exercise Behavior Among Navy Runners and Non-runners (Report No. 91-43)*. San Diego, Naval Health Research Center, 1991.
12. Conway TL, Cronan TA. Smoking, exercise, and physical fitness. *Prev Med* 1992;21:723-734.

13. Woodruff SI, Conway TL. *U.S. Navy Health Surveillance: Part 2. Responses to a Health Promotion Tracking Survey* (Report No. 92-5). San Diego, CA, Naval Health Research Center, 1992.
14. Mahoney BS, Wright LC. *1989 Department of Defense Women's Health Survey*. Arlington, VA, Defense Manpower Data Center, 1990.
15. National Center for Health Statistics. *Plan and Operation of the Second National Health and Nutrition Examination Survey, 1976-1980*, (Series 1, No. 15). Hyattsville, MD, US Department of Health and Human Services, 1981.
16. National Center for Health Statistics. *Plan and Operation of the Hispanic Health and Nutrition Examination Survey, 1982-1984* (Series 1, No. 19). Hyattsville, MD, US Department of Health and Human Services, 1985.
17. National Center for Health Statistics. *Sample Design: Third National Health and Nutrition Examination Survey (Vital Health Stat 2, No. 113)*. Hyattsville, MD, US Department of Health and Human Services, 1992.
18. National Center for Health Statistics. *Current estimates from the National Health Interview Survey, 1992 (Vital Health Stat 10, No. 189)*. Hyattsville, MD, US Department of Health and Human Services, 1994.
19. Siegel PZ, Frazier EL, Mariolis P, Brackbill RM, Smith C. Behavioral risk factor surveillance, 1991: Monitoring progress toward the nation's year 2000 health objectives (In *CDC Surveill Summ*, August 27, 1993). *Morb Mort Wkly Rep* 1993; 42(SS-4):1-21.
20. Robins LN, Regier DA. *Psychiatric Disorder in America*. New York, The Free Press, 1991.
21. Bray RM, Kroutil LA, Luckey JW, Wheelless SC, Iannacchione VG, Anderson, DW, Marsden ME, Dunteman GH. *1992 Worldwide Survey of Substance Abuse and Health Behaviors Among Military Personnel*. Research Triangle Park, NC, Research Triangle Institute, 1992.
22. Lurie PM, Tyson KW, Fineberg ML, Waisanen LA, Roberts JA, Sieffert ME, Mahoney BS. *Analysis of the 1992 Department of Defense Survey of Military Medical Care Beneficiaries*. Washington, DC, Office of the Assistant Secretary of Defense, 1993, November.
23. Bray RM, Kroutil LA, Wheelless SC, Marsden ME, Bailey SL, Fairbank JA, Harford TC. *1995 Department of Defense Survey of Health Related Behaviors Among Military Personnel (RTI/6019-6)*. Research Triangle Park, NC, Research Triangle Institute, 1995.
24. Briscoe ME. Why do people go to the doctor? Sex differences in the correlates of GP consultation. *Soc Sci Med* 1987; 25:507-513.

25. Nathanson CA. Illness and the feminine role: A theoretical view. *Soc Sci Med* 1975; 9:57-62.
26. Verbrugge LM. The twain meet: Empirical explanations of sex differences in health and mortality. *J Health Soc Behav* 1989; 30:282-304.
27. Nice DS, Hilton S. Sex differences and occupational influences on health care utilization aboard U.S. Navy ships. *Mil Psychol* 1994; 6:109-123.
28. Misner TR, Bell MR, O'Brien DE. *Health Status of Women in the Army*. Fort Sam Houston, TX, Health Services Command, U.S. Army Health Care Studies and Clinical Investigation Activity, 1987.
29. Hoiberg A. Sex and occupational differences in hospitalization rates among Navy enlisted personnel. *J Occup Med* 1980; 22:685-690.
30. Nice DS, Hilton SM. *Sex Differences in Health Care Requirements Aboard U.S. Navy Ships* (Report No. 90-2). San Diego, CA, Naval Health Research Center, 1990.
31. Hines JF. A comparison of clinical diagnoses among male and female soldiers deployed during the Persian Gulf War. *Mil Med* 1993; 158:99-101.
32. Calderon RL, Hilton SM. *Reproductive Outcomes in U.S. Navy Enlisted Women*. Briefing to BuMed; 1994, March 7.
33. Mason, R. E., S. C. Wheelless, B. J. George, J. A. Dever, R. A. Riemer, and T. W. Elig, 1995, *Sample Allocation for the Status of the Armed Forces Surveys, Proceedings of the Section on Survey Research Methods*, Vol II, American Statistical Association, pp. 769 - 774.
34. Dillman DA. *Mail and Telephone Surveys: The Total Design Method*. New York, Wiley & Sons, 1978.
35. Dillman DA. The design and administration of mail surveys. *Annu Rev Sociol* 1991; 17:225-249.

APPENDIX A
FINAL QUESTIONNAIRE

1998 Total Force Health Assessment

Survey Approval Authority: U.S. Army Research Institute for the Behavioral and Social Sciences
 Survey Control Number: TAPC-ARI-AO-98-3
 RCS: MILPC-3

Introduction

What is this study about? This study is mainly about your health with questions on illness, stress, smoking, and sexual behavior, for example.

How will your answers be used? Your answers will be combined with those from other military personnel to prepare a final report. The information in the report will be used to improve the quality of military life.

Who is overseeing the study? Research Triangle Institute, a not-for-profit research company, is under contract to the Department of Defense to oversee this study.

How were you selected? You were randomly selected to participate in this important survey.

Must you participate? Your participation in this survey is voluntary, but the survey's success depends on your willingness to take part. You represent thousands of other personnel, and we can't substitute anyone for you. Therefore, we encourage you to answer all of the questions honestly, but you are not required to answer any question to which you object.

Who will see your answers? Only civilian researchers will see your answers. No military personnel will ever see your individual answers. This questionnaire is confidential. **DO NOT WRITE YOUR NAME OR SOCIAL SECURITY NUMBER ANYWHERE ON THIS BOOKLET.**

Instructions for Completing the Questionnaire

- In responding to this questionnaire, you may find questions that you feel are repetitious. Please realize that it is important for us to ask questions about different aspects of the same issue to better understand it. In addition, we ask you NOT to skip questions—even if you don't think they apply to you—unless you are instructed to do so or you object to answering them. An important part of questionnaire design is making sure the questions follow the same patterns used in other questionnaires so we can compare information. Our comparisons may not be valid if you skip questions when you are not asked to skip them.
- Most questions provide a set of answers. Read all of the printed answers before marking your choice. If none of the printed answers exactly applies to you, mark the circle for the one answer that best fits your situation.
- Use only a soft-lead pencil (such as a #2) to complete this questionnaire.
- Make heavy black marks that fill the circle of your answer.

CORRECT MARK



INCORRECT MARKS



- Completely erase any answers you change.
- Do not make any stray marks anywhere in this booklet.
- For many questions, you should mark only one circle for your answer in the column below the question, as shown:

EXAMPLE: In general, would you say your health is:

- Excellent
- Very good
- Good
- Fair
- Poor

- Sometimes you will be asked to "Darken one circle on each line." For these questions, record an answer to each part of the question, as shown:

EXAMPLE:

Has a health care provider ever told you that you had any of the following?

If yes, what was the result?

	No, Never	Yes, But No Longer a Problem	Yes, Still a Problem
a. Asthma	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
b. Chronic bronchitis	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
c. Chronic rhinitis or hay fever	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>

- If you are asked to give numbers for your answer, please complete the grid as shown below:

EXAMPLE:

Think about your illnesses you may have had in the past 12 months. How many days were you unable to perform your military job because of an illness in the past 12 months?

- First, enter the number of days in the boxes. Use all three boxes. Write ONE number in each box.
- Always write the last number in the right-hand box. Fill in any unused boxes with zeroes. For example, an answer of "5 days" would be written as "005."
- Then, darken the matching circle below each box.

DAYS		
0	0	5
<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>
<input type="radio"/> 1	<input type="radio"/> 1	<input type="radio"/> 1
<input type="radio"/> 2	<input type="radio"/> 2	<input type="radio"/> 2
<input type="radio"/> 3	<input type="radio"/> 3	<input type="radio"/> 3
<input type="radio"/> 4	<input type="radio"/> 4	<input type="radio"/> 4
<input type="radio"/> 5	<input type="radio"/> 5	<input checked="" type="radio"/>
<input type="radio"/> 6	<input type="radio"/> 6	<input type="radio"/> 6
<input type="radio"/> 7	<input type="radio"/> 7	<input type="radio"/> 7
<input type="radio"/> 8	<input type="radio"/> 8	<input type="radio"/> 8
<input type="radio"/> 9	<input type="radio"/> 9	<input type="radio"/> 9

Now, please turn the page and begin with question 1. →

DEMOGRAPHIC INFORMATION

1. In which component of the Military do you currently serve?*

- Active Army (USA)
- Army National Guard (ARNG)
- Army Reserve (USAR)
- Naval Reserve (USNR)
- Active Air Force (USAF)
- Air National Guard (ANG)
- Air Force Reserve (USAFR)
- Marine Corps Reserve (USMCR)

2. In all, how many years have you served on active duty? Do not include Reserve/Guard years.

- (Choose the one answer that best applies)*
- Never served on active duty
 - Less than 6 months
 - At least 6 months, but less than 1 year
 - At least 1 year, but less than 2 years
 - At least 2 years, but less than 3 years
 - At least 3 years, but less than 4 years
 - At least 4 years, but less than 5 years
 - At least 5 years, but less than 10 years
 - At least 10 years, but less than 20 years
 - 20 or more years

3. In all, how many years have you served in the Guard or Reserve? Do not include active-duty years.

- (Choose the one answer that best applies)*
- Never served in the Guard or Reserve
 - Less than 6 months
 - At least 6 months, but less than 1 year
 - At least 1 year, but less than 2 years
 - At least 2 years, but less than 3 years
 - At least 3 years, but less than 4 years
 - At least 4 years, but less than 5 years
 - At least 5 years, but less than 10 years
 - At least 10 years, but less than 20 years
 - 20 or more years

4. In the past 12 months, what is the total number of actual days you spent performing your military duty in the Guard or Reserves? Do not include days spent in annual training.

- (Choose the one answer that best applies)*
- Active-duty military [Go to question 5]
 - Less than 21 days
 - At least 21 days, but less than 28 days
 - At least 28 days, but less than 35 days
 - At least 35 days, but less than 60 days
 - At least 60 days, but less than 90 days
 - More than 90 days

5. Are you male or female?

- Male
- Female

6. What is your highest level of education now?

(Choose the one answer that best applies)

- Did not graduate from high school
- GED or ABE certificate
- High school graduate
- Trade or technical school graduate
- Some college but not a 4-year degree
- 4-year college degree (BA, BS, or equivalent)
- Graduate or professional study but no graduate degree
- Graduate or professional degree

7. About how tall are you without shoes on?

- | | | |
|---|---|---|
| <input type="radio"/> 4 feet, 7 inches | <input type="radio"/> 5 feet, 0 inches | <input type="radio"/> 6 feet, 0 inches |
| <input type="radio"/> 4 feet, 8 inches | <input type="radio"/> 5 feet, 1 inch | <input type="radio"/> 6 feet, 1 inch |
| <input type="radio"/> 4 feet, 9 inches | <input type="radio"/> 5 feet, 2 inches | <input type="radio"/> 6 feet, 2 inches |
| <input type="radio"/> 4 feet, 10 inches | <input type="radio"/> 5 feet, 3 inches | <input type="radio"/> 6 feet, 3 inches |
| <input type="radio"/> 4 feet, 11 inches | <input type="radio"/> 5 feet, 4 inches | <input type="radio"/> 6 feet, 4 inches |
| | <input type="radio"/> 5 feet, 5 inches | <input type="radio"/> 6 feet, 5 inches |
| | <input type="radio"/> 5 feet, 6 inches | <input type="radio"/> 6 feet, 6 inches |
| | <input type="radio"/> 5 feet, 7 inches | <input type="radio"/> 6 feet, 7 inches |
| | <input type="radio"/> 5 feet, 8 inches | <input type="radio"/> 6 feet, 8 inches |
| | <input type="radio"/> 5 feet, 9 inches | <input type="radio"/> 6 feet, 9 inches |
| | <input type="radio"/> 5 feet, 10 inches | <input type="radio"/> 6 feet, 10 inches |
| | <input type="radio"/> 5 feet, 11 inches | <input type="radio"/> 6 feet, 11 inches |

8. About how much do you weigh without shoes on?

(WOMEN: If you are currently pregnant, please enter your usual weight before you became pregnant.)

- First, enter your weight in the boxes. Use **all three** boxes. Write **ONE** number in each box.

POUNDS		
0	0	0
1	1	1
2	2	2
3	3	3
4	4	4
5	5	5
6	6	6
7	7	7
8	8	8
9	9	9

- Then, darken the matching circle below each box.

* Active Marine Corps (USMC) and Active Navy (USN) are not included in this list because they were already surveyed.

DEMOGRAPHIC INFORMATION

9. How old were you on your last birthday?

• First, enter your age in the boxes. Use both boxes. Write ONE number in each box.

• Then, darken the matching circle below each box.

YRS.	
0	0
1	1
2	2
3	3
4	4
5	5
6	6
7	7
8	8
9	9

10. What is your current marital status?

- Not married, but living as married
- Married
- Separated and not living as married
- Divorced and not living as married
- Widowed and not living as married
- Single, never married, and not living as married

11. Are you of Spanish or Hispanic origin or descent?

- No (not Spanish or Hispanic)
- Yes, Puerto Rican
- Yes, Mexican or Mexican-American or Chicano
- Yes, Cuban
- Yes, Central or South American
- Yes, other Spanish or Hispanic origin

12. Which of these categories best describes you?

- American Indian/Eskimo/Aleut
- Black/African-American
- Asian/Chinese/Japanese/Korean/Filipino/Asian Indian/Pacific Islander
- White/Caucasian
- Other

13. Which of the following best describes your employment situation?

(Choose the one answer that best applies)

- Active-duty military
- Employed as a civilian in a military job
- Employed as a civilian in a non-military job
- Self-employed
- Unemployed
- Homemaker
- Student
- Retired
- Unable to work

14. What is your pay grade?

ENLISTED

- E-1
- E-2
- E-3
- E-4
- E-5
- E-6
- E-7
- E-8
- E-9

OFFICER

- Trainee
- W1-W5
- O-1 or O-1E
- O-2 or O-2E
- O-3 or O-3E
- O-4
- O-5
- O-6
- O-7 to O-10

15. Which of the following categories best describes your military responsibilities? If you need to, please refer to the handout that came with this survey for examples of different job categories.

(Choose the one answer that best applies)

ENLISTED

- Infantry, Gun Crew, Air Crew, or Seamanship Specialist
- Electronic Equipment Repair Specialist
- Communications or Intelligence Specialist
- Health Care Specialist/Technician
- Other Technical or Allied Specialist
- Functional Support and Administration
- Electrical or Mechanical Equipment Repair Specialist
- Craftsman
- Service and Supply Handler
- Other (e.g., officer candidates, students, special duties)

OFFICER

- General Officer, Executive Officer, or Commanding Officer
- Tactical Operations Officer
- Intelligence Officer
- Engineering or Maintenance Officer
- Scientist, Professional, or Staff Support (not involved in health care)
- Health Care Provider
- Administrator or Operational Support
- Supply, Procurement, or Allied Officer
- Other (e.g., students, trainees, billet designators)

16. What was your annual household income from ALL sources last year? Please estimate your annual household income before taxes were taken out. As with all information you provide on this survey, your answer to this question will be kept confidential.

- Less than \$15,000
- \$15,000 to \$19,999
- \$20,000 to \$24,999
- \$25,000 to \$34,999
- \$35,000 to \$44,999
- \$45,000 to \$49,999
- \$50,000 to \$74,999
- \$75,000 or more

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HEALTH

17. In general, would you say your health is:

- Excellent
- Very good
- Good
- Fair
- Poor

18. During the past 30 days, have you had any of the following problems with your work or other regular daily activities as a result of your physical health?
(Darken one circle on each line)

Because of my physical health during the past 30 days, I:

Yes No

- a. Cut down the amount of time I spent on work or other activities
- b. Accomplished less than I would have liked
- c. Was limited in the kind of work or other activities I could do
- d. Had difficulty performing the work or other activities (took extra effort)

19. During the past 30 days, have you had any of the following problems with your work or other regular daily activities as a result of any emotional problems (such as feeling depressed or anxious)?
(Darken one circle on each line)

Because of emotional problems during the past 30 days, I:

Yes No

- a. Cut down on the amount of time I spent on work or other activities
- b. Accomplished less than I would have liked
- c. Didn't do work or other activities as carefully as usual

20. During the past 30 days, to what extent has your physical health or emotional problems interfered with your normal social activities with family, friends, neighbors, or groups?

- Not at all
- Slightly
- Moderately
- Quite a bit
- Extremely

21. How much of the time during the past 30 days:

None of the time
A little of the time
Some of the time
A good bit of the time
Most of the time
All of the time

- a. Did you feel full of pep?
- b. Did you have a lot of energy?
- c. Did you feel worn out?
- d. Did you feel tired?

22. How true or false is each of the following statements for you?

Definitely false
Mostly false
Don't know
Mostly true
Definitely true

- a. I seem to get sick a little easier than other people I know
- b. I am as healthy as anybody I know
- c. I expect my health to get worse.
- d. My health is excellent

23. During the past 30 days, how much of the time have your physical or emotional problems interfered with your normal social activities (like visiting with friends, relatives, etc.)?

- All of the time
- Most of the time
- Some of the time
- A little of the time
- None of the time

24. During the past 30 days, on the average, how many hours of sleep did you get per night?

- 0 1 2 3 4 5 6 7 8 9 10 11

HEALTH

25. Has a health care provider ever told you that you had any of the following?

If yes, what was the result?

No, Never	Yes, But No Longer a Problem	Yes, Still a Problem
-----------	------------------------------	----------------------

- | | No, Never | Yes, But No Longer a Problem | Yes, Still a Problem |
|--|-----------------------|------------------------------|-----------------------|
| a. Asthma | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| b. Chronic bronchitis | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| c. Chronic rhinitis or hay fever | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| d. Other allergies | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| e. Positive skin test for tuberculosis | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| f. Cervical cancer | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| g. Breast cancer | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| h. Skin cancer | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| i. Other cancer | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| j. Heart disease or angina | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| k. High blood pressure (hypertension) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| l. High cholesterol | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| m. Anemia (low blood iron) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| n. Varicose veins | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

Has a health care provider ever told you that you had:

- | | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
|--|-----------------------|-----------------------|-----------------------|
| o. Hernia or rupture | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| p. Hemorrhoids | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| q. Ulcer | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| r. Bowel or intestinal trouble (e.g., colitis) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| s. Gallstones | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| t. Thyroid disease | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| u. Diabetes | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| v. Hepatitis | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| w. Urinary tract infection | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| x. Repeated kidney infections | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| y. Kidney stones | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| z. Other kidney disease | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

Has a health care provider ever told you that you had:

- | | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
|---|-----------------------|-----------------------|-----------------------|
| aa. Pelvic inflammatory disease (PID) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| bb. Herpes or genital warts | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| cc. Other sexually transmitted diseases (e.g., gonorrhea, syphilis) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| dd. Positive test for the HIV/AIDS virus | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| ee. Sterility/infertility | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| ff. Arthritis | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| gg. Other bone, muscle, or joint problems | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| hh. Chronic back problems (e.g., sciatica) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| ii. Nerve pain (neuralgia) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| jj. Migraines | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| kk. Head injury (involving stitches or unconsciousness) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| ll. Depression | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| mm. Hearing loss or problems | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| nn. Vision impairment or problems | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| oo. Gum disease | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

26. Think about any illnesses you may have had in the past 12 months. How many days were you unable to perform your military job because of an illness in the past 12 months? (WOMEN: Do NOT count illnesses that occurred during pregnancy or maternity leave as part of your answer.)

• First, enter the number of days in the boxes. Use all three boxes. Write ONE number in each box.

• If you have NOT had an illness in the past 12 months, please enter 000.

• If you had any illnesses in the past 12 months but none of them made you unable to perform your military job, please enter 000.

• Then, darken the matching circle below each box.

DAYS		
0	0	0
1	1	1
2	2	2
3	3	3
4	4	4
5	5	5
6	6	6
7	7	7
8	8	8
9	9	9

27. Think about any injuries you may have had in the past 12 months. How many days were you unable to perform your military job because of an injury in the past 12 months? (WOMEN: Do NOT count injuries that occurred during maternity leave or pregnancy as part of your answer.)

• First, enter the number of days in the boxes. Use all three boxes. Write ONE number in each box.

• If you have NOT had an injury in the past 12 months, please enter 000.

• If you had any injuries in the past 12 months but none of them made you unable to perform your military job, please enter 000.

• Then, darken the matching circle below each box.

DAYS		
0	0	0
1	1	1
2	2	2
3	3	3
4	4	4
5	5	5
6	6	6
7	7	7
8	8	8
9	9	9

If you are Reserve/Guard personnel, please go to question 28 at the top of the first column on the next page.

If you are active-duty personnel, please go to question 30 at the top of the second column on the next page.

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If you are in the Guard or Reserve, "usual job" refers to your civilian job. If you are a student or homemaker, your work falls into the category of usual job.

28. Think about any **illnesses** you may have had in the **past 12 months**. How many days were you unable to perform your **usual job** because of an **illness** in the **past 12 months**? (WOMEN: Do NOT count illnesses that occurred during maternity leave or pregnancy as part of your answer.)

- First, enter the number of days in the boxes. Use all three boxes. Write ONE number in each box.
- If you have **NOT** had an illness in the past 12 months, please enter 000.
- If you had any illnesses in the past 12 months but none of them made you unable to perform your usual job, please enter 000.
- Then, darken the matching circle below each box.

DAYS		
0	0	0
1	1	1
2	2	2
3	3	3
4	4	4
5	5	5
6	6	6
7	7	7
8	8	8
9	9	9

29. Think about any **injuries** you may have had in the **past 12 months**. How many days were you unable to perform your **usual job** because of an **injury** in the **past 12 months**? (WOMEN: Do NOT count injuries that occurred during maternity leave or pregnancy as part of your answer.)

- First, enter the number of days in the boxes. Use all three boxes. Write ONE number in each box.
- If you have **NOT** had an injury in the past 12 months, please enter 000.
- If you had any injuries in the past 12 months but none of them made you unable to perform your usual job, please enter 000.
- Then, darken the matching circle below each box.

DAYS		
0	0	0
1	1	1
2	2	2
3	3	3
4	4	4
5	5	5
6	6	6
7	7	7
8	8	8
9	9	9

Preventive Care

30. A fecal occult blood test is a test of a bowel movement to determine whether it contains blood. When did you have your most recent fecal occult blood test?

- Within the past year
- More than 1 year ago, but within the past 2 years
- More than 2 years ago, but within the past 3 years
- More than 3 years ago, but within the past 5 years
- More than 5 years ago
- Never
- Don't know

31. About how long has it been since you had your blood pressure taken by a doctor, nurse, or other health care professional?

- Within the past year
- More than 1 year ago, but within the past 2 years
- More than 2 years ago, but within the past 3 years
- More than 3 years ago, but within the past 5 years
- More than 5 years ago
- Never
- Don't know

32. About how long has it been since you had your cholesterol checked?

- Within the past year
- More than 1 year ago, but within the past 2 years
- More than 2 years ago, but within the past 3 years
- More than 3 years ago, but within the past 5 years
- More than 5 years ago
- Never
- Don't know

33. How long has it been since you last visited a dentist or dental health professional for a routine checkup or cleaning?

- Within the past year
- More than 1 year ago, but within the past 2 years
- More than 2 years ago, but within the past 3 years
- More than 3 years ago, but within the past 5 years
- More than 5 years ago
- Never
- Don't know

Health Care

34. In the past 12 months, what has been the main (or primary) source of payment for your medical or doctor's bills?

(Choose the one answer that best applies)

- Active-duty medical benefits
- Reserve or Guard medical benefits
- Veterans Administration medical benefits
- Other government-sponsored medical insurance (such as Federal employee insurance, or Medicaid)
- Health insurance from a civilian employer (including insurance you receive through your spouse's employment)
- Other private insurance coverage
- Your own money
- Money received or borrowed from family or friends

35. In the past 12 months, what has been the main (or primary) source of payment for your dental bills?

(Choose the one answer that best applies)

- Active-duty medical/dental benefits
- Reserve or Guard medical/dental benefits
- Veterans Administration medical/dental benefits
- Other government-sponsored medical insurance (such as Federal employee insurance, or Medicaid)
- Health insurance from a civilian employer (including insurance you receive through your spouse's employment)
- Other private insurance coverage
- Your own money
- Money received or borrowed from family or friends

36. In the past 12 months, did cost keep you from getting any of the following?

(Darken one circle on each line)

Cost kept me from getting:	Yes	No
a. Health insurance coverage	<input type="radio"/>	<input type="radio"/>
b. Treatment of an illness or injury	<input type="radio"/>	<input type="radio"/>
c. Follow-up visit for an illness or injury	<input type="radio"/>	<input type="radio"/>
d. General physical exam	<input type="radio"/>	<input type="radio"/>
e. Prescription medication	<input type="radio"/>	<input type="radio"/>
f. Eye care	<input type="radio"/>	<input type="radio"/>
g. Prenatal care	<input type="radio"/>	<input type="radio"/>
h. Any type of surgery	<input type="radio"/>	<input type="radio"/>
i. Mental health care	<input type="radio"/>	<input type="radio"/>
j. Emergency care	<input type="radio"/>	<input type="radio"/>
k. Dental care	<input type="radio"/>	<input type="radio"/>
l. Counseling for an alcohol or other drug problem	<input type="radio"/>	<input type="radio"/>

37. In the past 12 months, were you unable to get any of the kinds of care described in question 36 because you could not meet your deductible or co-payments?

- Yes
- No

38. Please indicate how many times you went to a military health care provider for your own health care during the past 12 months. Care from a Veterans Administration facility is not included here—Go to question 39.

Did not receive care from a military provider in past 12 months [Go to question 39]

I went to a military provider for:	Number of times				
(Darken one circle on each line)	0	1	2	3	4 or more
a. Treatment of an illness or injury	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
b. Follow-up visit for an illness or injury	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
c. General physical exam	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
d. Prescription refill only	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
e. Eye exam only	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
f. Prenatal care	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
g. Same day surgery	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
h. Surgery that required an overnight hospital stay	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
i. Overnight hospital stay (other than for surgery)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
j. Mental health care	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
k. Emergency care	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
l. Dental care	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
m. Counseling for an alcohol or other drug problem	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
n. Other type of care	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

39. Please indicate how many times you went to a civilian health care provider for your own health care during the past 12 months. Include care from a Veterans Administration facility here.

Did not receive care from a civilian provider in past 12 months [Go to question 40 at the top of the next page]

I went to a civilian provider for:	Number of times				
(Darken one circle on each line)	0	1	2	3	4 or more
a. Treatment of an illness or injury	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
b. Follow-up visit for an illness or injury	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
c. General physical exam	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
d. Prescription refill only	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
e. Eye exam only	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
f. Prenatal care	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
g. Same day surgery	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
h. Surgery that required an overnight hospital stay	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
i. Overnight hospital stay (other than for surgery)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
j. Mental health care	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
k. Emergency care	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
l. Dental care	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
m. Counseling for an alcohol or other drug problem	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
n. Other type of care	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

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Stress

40. When you feel pressured, stressed, or anxious, how often do you engage in each of the following activities?

Nearly all the time
 Rather often
 Sometimes
 Rarely
 Not at all

- a. Talk to a friend or family member
- b. Light up a cigarette
- c. Have a drink
- d. Exercise or play sports
- e. Get something to eat
- f. Smoke marijuana or use other illegal drugs
- g. Think of a plan to solve the problem
- h. Think about hurting yourself or killing yourself

41. During the past 12 months, how much stress did you experience in your usual job?

- A great deal
- A fairly large amount
- Some
- A little
- None at all
- I don't have a usual or regular job

42. During the past 12 months, how much stress did you experience in your personal life?

- A great deal
- A fairly large amount
- Some
- A little
- None at all

43. During the past 12 months, how much did stress in your usual job interfere with your ability to perform your military responsibilities?

- A lot
- Some
- A little
- Not at all
- Had no stress in my usual job in the past 12 months
- I don't have a usual or regular job

44. During the past 12 months, how much did stress in your personal life interfere with your ability to perform your military responsibilities?

- A lot
- Some
- A little
- Not at all
- Had no stress in my personal life in the past 12 months

Emotions

45. Below is a list of ways you might have felt or behaved. Please indicate how often you have felt this way during the past 7 days.

Most or all of the time (5-7 days)
 Occasionally or a moderate amount of time (3-4 days)
 Some or a little of the time (1-2 days)
 Rarely or none of the time (less than 1 day)

In the past 7 days:

- a. My sleep was restless
- b. I felt lonely
- c. I felt I could not shake off the blues even with help from my family or friends
- d. I felt sad
- e. I could not get "going"
- f. I had trouble keeping my mind on what I was doing
- g. I felt that everything I did was an effort

46. How do you feel about your life as a whole?

- Pleased/delighted
- Mostly satisfied
- Mixed
- Mostly dissatisfied
- Terrible/unhappy

47. During the past 12 months, when you have gotten angry, how often have you:

Very often
 Fairly often
 Sometimes
 Almost never
 Never

- a. Sworn and cursed
- b. Gotten into an argument
- c. Hid your anger/tried not to show it
- d. Yelled or shouted
- e. Tried to calmly explain your feelings or opinions
- f. Just stopped talking, avoided arguing, and started to do something else
- g. Made a fist and shown an angry expression on your face
- h. Taken out your anger by kicking things (like a chair), giving a door a good slam, punching the wall, or looking for something to throw or smash

Weight Management and Nutrition

48. During the past 12 months, have you tried to lose weight?

- Yes
- No

49. How easy or difficult has it been for you to meet military weight standards?

- Very easy
- Somewhat easy
- Somewhat difficult
- Very difficult

50. During the past 12 months, have you changed your eating habits because of any medical condition?

- Yes
- No

51. Are you satisfied with your eating patterns?

- Yes
- No

52. Do you ever eat in secret (intentionally hide your eating)?

- Yes
- No

53. During the past 7 days, on about how many days did you:

(Darken one circle on each line)

	Number of Days							
	0	1	2	3	4	5	6	7
a. Eat breakfast	<input type="radio"/>							
b. Eat snacks between meals	<input type="radio"/>							
c. Overeat	<input type="radio"/>							
d. Not eat enough	<input type="radio"/>							
e. Take vitamin pills	<input type="radio"/>							
f. Take calcium supplements	<input type="radio"/>							

54. During the past 7 days, about how many times did you:

More than 7 times
4-6 times
1-3 times
Never

- a. Eat high-fat meats or dairy products (e.g., hamburger, hot dogs, steak, bacon, whole milk, cheese, ice cream) . . .
- b. Eat fried foods (e.g., french fries, fried chicken, fried eggs) . . .
- c. Eat sweets (e.g., cakes, pies, cookies, candies) . . .
- d. Eat low-fat meats or dairy products (e.g., chicken or turkey without skin, low-fat milk, yogurt) . . .
- e. Eat "leafy" vegetables (e.g., broccoli, cabbage, greens, spinach) . . .
- f. Eat "starchy" vegetables (e.g., beans, peas, corn, potatoes) . . .
- g. Eat fruits (e.g., apples, fruit juice, raisins, dried fruit, melons, bananas) . . .
- h. Eat high-fiber foods (whole grain breads, cereals, bran) . . .

55. How important do you feel that food choices are in terms of your health?

- Probably the most important factor
- Very important, but not the most important factor
- Important
- Not very important
- Of little or no consequence

56. Think about times when you've bought food—that could include groceries, food from restaurants, or food from snack bars. How important to you are the following considerations when you buy food?

Extremely important
Very important
Moderately important
Somewhat important
Not at all important

When you buy food, how important are a food's:

- a. Health benefits, nutritional value . . .
- b. Price, cost . . .
- c. Taste, eating enjoyment . . .
- d. Convenience, ease of preparation . . .
- e. Calories . . .

Exercise

57. During the past 30 days, how often did you do each of the following?

- About every day
- 5-6 days a week
- 3-4 days a week
- 1-2 days a week
- 1-3 days in past 30 days
- Never in past 30 days

In the past 30 days, I:

- a. Engaged in strenuous physical activity for 20 minutes or more (such as running, jogging, or walking) ○ ○ ○ ○ ○ ○ ○ ○
- b. Engaged in activities that improve muscle strength (such as pushups, situps, weight lifting, or resistance training) ○ ○ ○ ○ ○ ○ ○ ○
- c. Engaged in mild physical activity (such as baseball, bowling, or volleyball) more for the recreation than for the exercise ○ ○ ○ ○ ○ ○ ○ ○

58. If you indicated that you engaged in strenuous activity in question 57, how long have you been doing that (as often as you said in question 57)?

- Didn't do any strenuous activity in the past 30 days
- Less than 1 month
- At least 1 month, but less than 4 months
- At least 4 months, but less than 1 year
- At least 1 year, but less than 3 years
- At least 3 years, but less than 5 years
- 5 years or more

59. How would you rate your current physical fitness?

- Poor
- Fair
- Good
- Very good
- Excellent

60. In the past 12 months, how easy or difficult was it for you to pass your service's Physical Training (PT) test?

- Very easy
- Somewhat easy
- Somewhat difficult
- Very difficult
- I have taken a PT test, but not in the past 12 months
- I have never taken a PT test

Alcohol Use

Please answer ALL of the following alcohol use questions even if you don't drink or you're not a regular drinker.

61. During the past 30 days, on how many days did you drink one or more drinks of alcoholic beverages?

Count as a drink a can or bottle of beer; a wine cooler or a glass of wine, champagne, or sherry; or a shot of liquor or a mixed drink or cocktail.

- 28-30 days (about every day)
- 20-27 days (5-6 days a week, average)
- 11-19 days (3-4 days a week, average)
- 4-10 days (1-2 days a week, average)
- 2-3 days in the past 30 days
- Once in the past 30 days
- None in the past 30 days
- Never drank alcoholic beverages in my life

62. Think about the days when you drank in the past 30 days. How many drinks did you usually drink on a TYPICAL day?

Count as a drink a can or bottle of beer; a wine cooler or a glass of wine, champagne, or sherry; or a shot of liquor or a mixed drink or cocktail.

- 9 drinks or more
- 8 drinks
- 7 drinks
- 6 drinks
- 5 drinks
- 4 drinks
- 3 drinks
- 2 drinks
- 1 drink
- None in the past 30 days
- Never drank alcoholic beverages in my life

63. During the past 30 days, on how many days did you have 5 or more drinks on the same occasion? By "occasion," we mean at the same time or within a couple of hours of each other.

- 28-30 days (about every day)
- 20-27 days (5-6 days a week, average)
- 11-19 days (3-4 days a week, average)
- 4-10 days (1-2 days a week, average)
- 2-3 days in the past 30 days
- Once in the past 30 days
- Drank during the past 30 days, but never had 5 or more drinks on the same occasion
- None in the past 30 days
- Never drank alcoholic beverages in my life

Tobacco Use

Please answer ALL of the following tobacco use questions even if you don't use tobacco products or you're not a regular user.

64. When was the last time you smoked a cigarette?

- Today
- During the past 30 days
- 5-8 weeks ago
- 2-3 months ago
- 4-6 months ago
- 7-12 months ago
- 1-3 years ago
- More than 3 years ago
- Never smoked cigarettes in my life

65. Think about the past 30 days. How many cigarettes did you usually smoke on a TYPICAL day?

- About 3 or more packs a day (more than 55 cigarettes)
- About 2½ packs a day (46-55 cigarettes)
- About 2 packs a day (36-45 cigarettes)
- About 1½ packs a day (26-35 cigarettes)
- About 1 pack a day (16-25 cigarettes)
- About ½ pack a day (6-15 cigarettes)
- 1-5 cigarettes a day
- Less than 1 cigarette a day, on the average
- Did not smoke any cigarettes in the past 30 days
- Never smoked cigarettes in my life

66. Have you smoked at least 100 cigarettes in your entire life? (That would be 5 packs or more in your entire life.)

- Yes
- No

67. During the past 12 months, have you made a serious attempt to stop smoking cigarettes; that is, did you go for at least a week without smoking?

- Yes
- No
- Didn't smoke cigarettes in the past 12 months
- Never smoked cigarettes in my life

68. When was the last time you used chewing tobacco or snuff or other smokeless tobacco?

- During the past 30 days
- More than 1 month ago but within the past 6 months
- More than 6 months ago but within the past year
- More than 1 year ago but within the past 2 years
- More than 2 years ago
- Never used smokeless tobacco in my life

69. During the past 12 months, how often on the average have you used chewing tobacco or snuff or other smokeless tobacco?

- About every day
- 5-6 days a week
- 3-4 days a week
- 1-2 days a week
- 2-3 days a month
- About once a month
- 7-11 days in the past 12 months
- 3-6 days in the past 12 months
- Once or twice in the past 12 months
- Not once in the past 12 months
- Never used smokeless tobacco in my life

70. Have you used chewing tobacco or snuff or other smokeless tobacco at least 20 times in your entire life?

- Yes
- No

71. During the past 12 months, how often on the average have you smoked cigars or a pipe?

- About every day
- 5-6 days a week
- 3-4 days a week
- 1-2 days a week
- 2-3 days a month
- About once a month
- 7-11 days in the past 12 months
- 3-6 days in the past 12 months
- Once or twice in the past 12 months
- Not once in the past 12 months
- Never smoked cigars or pipes in my life

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Sexual Behavior

72. How many sexual partners have you had in the past 12 months?

- 0 1 2 3 4 5 6 7 8 9 10 11+

73. In the past 12 months, how often did you or your partner(s) use a condom when you had sex?

- Did not have sex in the past 12 months
 Never
 Hardly any of the time
 Some of the time
 About half of the time
 Most of the time
 Every time

74. In the past 12 months, have you ever had sex with anyone who has been told that he or she has HIV, AIDS, or the AIDS virus?

- Yes
 No
 Don't know

75. In the past 30 days, which of the following methods did you and your partner(s) use to prevent pregnancy?

- Did not have sex in the past 30 days [Go to question 78 at the top of the next page]
 Did not use any method to prevent pregnancy in the past 30 days [Go to question 76]

To prevent pregnancy, we used:
(Darken one circle on each line)

	Yes	No
a. Birth control pills	<input type="radio"/>	<input type="radio"/>
b. Depo-provera	<input type="radio"/>	<input type="radio"/>
c. Norplant	<input type="radio"/>	<input type="radio"/>
d. Condom	<input type="radio"/>	<input type="radio"/>
e. Diaphragm or cervical cap	<input type="radio"/>	<input type="radio"/>
f. Spermicide (foam, jelly, cream, suppositories)	<input type="radio"/>	<input type="radio"/>
g. Sponge	<input type="radio"/>	<input type="radio"/>
h. IUD	<input type="radio"/>	<input type="radio"/>
i. Douche	<input type="radio"/>	<input type="radio"/>
j. Withdrawal	<input type="radio"/>	<input type="radio"/>
k. Rhythm	<input type="radio"/>	<input type="radio"/>
l. Abstinence (not having sex when you had the opportunity)	<input type="radio"/>	<input type="radio"/>
m. Some other method	<input type="radio"/>	<input type="radio"/>

76. In the following question, "partner" refers to the person you have sex with the most. Have you or your partner:

	Yes	No
a. Had a vasectomy	<input type="radio"/>	<input type="radio"/>
b. Had a tubal ligation (had "tubes tied")	<input type="radio"/>	<input type="radio"/>
c. Had a hysterectomy	<input type="radio"/>	<input type="radio"/>
d. Found out that one of you was infertile or sterile	<input type="radio"/>	<input type="radio"/>

[If you answered "yes" to any of these, go to question 78 at the top of the next page]

77. A list of reasons why people sometimes do not use birth control follows. Please indicate if each reason was a reason why you did not use birth control in the past 30 days:

- Used birth control in the past 30 days [Go to question 78 at the top of the next page]

I did NOT use birth control in the past 30 days because:

(Darken one circle on each line)

	Yes	No
a. Using birth control is against my religious or moral beliefs	<input type="radio"/>	<input type="radio"/>
b. My partner(s) didn't want us to use birth control	<input type="radio"/>	<input type="radio"/>
c. Using birth control is too much of a hassle	<input type="radio"/>	<input type="radio"/>
d. We wanted to have a baby (get pregnant)	<input type="radio"/>	<input type="radio"/>
e. Using birth control is too expensive	<input type="radio"/>	<input type="radio"/>
f. I was too embarrassed to ask for it	<input type="radio"/>	<input type="radio"/>
g. Some other reason	<input type="radio"/>	<input type="radio"/>

Life Changes

78. In the **past 12 months**, how many serious personal losses or difficult problems have you had to handle (such as a promotion passover, divorce or separation, legal or disciplinary action, bankruptcy, large bills or credit card debt, death of someone close, serious illness or injury of a loved one)?

- Many
- Some
- Few
- None

79. Have you seriously considered suicide?
(Darken one circle on each line)

I have seriously considered suicide within the:

- | | Yes | No |
|------------------|-----------------------|-----------------------|
| a. Past 2 years | <input type="radio"/> | <input type="radio"/> |
| b. Past year | <input type="radio"/> | <input type="radio"/> |
| c. Past 2 months | <input type="radio"/> | <input type="radio"/> |

If you answered "yes" to any of the items in question 79, please seek help. If you are in the US, contact Covenant House at 1-800-999-9999 (an anonymous, civilian hotline). They can also give you information about resources available in your area. If you are outside the US, please contact your unit's chaplain.

80. In the **past 12 months**, how often did you have any serious problems dealing with your spouse, parents, friends, co-workers, or with your children?

- Often
- Sometimes
- Rarely (but at least once)
- Never

81. In the **past 12 months**, how often did you experience a major **pleasant** change (such as a promotion, marriage, birth, award)?

- Often
- Sometimes
- Rarely (but at least once)
- Never

82. What causes the biggest problem in your life?
(Choose the one answer that best applies)

- Social life
- Family
- Supervisor
- Military job
- Civilian job
- Spouse's job
- Health
- Money
- Something else
- No problems

For this questionnaire, please use the following definitions for emotional, sexual, and physical abuse.
Physical abuse is forceful behavior (even once) that may result in physical injury.
Sexual abuse is taking advantage of another person by fondling, rape, or forcing that person to take part in other sex acts against that person's will.
Emotional abuse is the misuse of a person's feelings; as a result, one thinks less of oneself.

83. Were you abused before entering the Military?
(Darken one circle on each line)

- | Before entering the Military, I had been: | Yes | No |
|---|-----------------------|-----------------------|
| a. Physically abused | <input type="radio"/> | <input type="radio"/> |
| b. Sexually abused | <input type="radio"/> | <input type="radio"/> |
| c. Emotionally abused | <input type="radio"/> | <input type="radio"/> |

84. Since entering the Military, have you been abused by someone else in the Military?
(Darken one circle on each line)

- | Since entering the Military, I have been: | Yes | No |
|---|-----------------------|-----------------------|
| a. Physically abused | <input type="radio"/> | <input type="radio"/> |
| b. Sexually abused | <input type="radio"/> | <input type="radio"/> |
| c. Emotionally abused | <input type="radio"/> | <input type="radio"/> |

85. Since entering the Military, have you been abused by someone NOT in the Military?
(Darken one circle on each line)

- | Since entering the Military, I have been: | Yes | No |
|---|-----------------------|-----------------------|
| a. Physically abused | <input type="radio"/> | <input type="radio"/> |
| b. Sexually abused | <input type="radio"/> | <input type="radio"/> |
| c. Emotionally abused | <input type="radio"/> | <input type="radio"/> |

86. Have you ever received counseling to help you deal with abuse you've suffered?
(Darken one circle on each line)

- | I have received counseling for: | Yes | No | Never been abused in this way |
|---------------------------------|-----------------------|-----------------------|-------------------------------|
| a. Physical abuse | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| b. Sexual abuse | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| c. Emotional abuse | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

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LIFESTYLE

Friends and Family

87. How many close friends do you have (people you feel at ease with, can talk to about private matters, and can call for help)?

- 0 1 2 3 4 5 6 7 8 9 10 11+

88. How many relatives do you have that you feel close to?

- 0 1 2 3 4 5 6 7 8 9 10 11+

89. How many of these friends or relatives do you see at least once a month?

- 0 1 2 3 4 5 6 7 8 9 10 11+

90. Are you a member of any social clubs or groups?

- Yes
 No

91. Are you an active member of a church, temple, or other religious organization?

- Yes
 No

92. In the past 12 months, how many children (natural, adopted, stepchildren, or grandchildren) under the age of 21 lived in your household?

- 0 1 2 3 4 5 6 7 8 9 10 11+

93. What are the ages of the children who lived in your household in the past 12 months?

- No children lived in my household in the past 12 months [Go to question 94]

I have had children living in my household who are:

(Darken one circle on each line)

- | | Yes | No |
|---------------------------------|-----------------------|-----------------------|
| a. Less than 6 months old | <input type="radio"/> | <input type="radio"/> |
| b. 6 months to under 1 year old | <input type="radio"/> | <input type="radio"/> |
| c. 12 to 23 months old | <input type="radio"/> | <input type="radio"/> |
| d. 24 to 35 months old | <input type="radio"/> | <input type="radio"/> |
| e. 3 to 5 years old | <input type="radio"/> | <input type="radio"/> |
| f. 6 to 9 years old | <input type="radio"/> | <input type="radio"/> |
| g. 10 to 12 years old | <input type="radio"/> | <input type="radio"/> |
| h. 13 to 15 years old | <input type="radio"/> | <input type="radio"/> |
| i. 16 to 20 years old | <input type="radio"/> | <input type="radio"/> |

Disaster or Violence Exposure

Exposure to a disaster or violence can sometimes have long-term effects. The following questions will help to provide a history of exposure to disasters or violence that may help in studying their effects.

94. Have you ever been exposed to a natural disaster involving injuries or fatalities (such as earthquakes, fires, floods)?

(Darken one circle on each line)

I have been exposed to a natural disaster as:

- | | Yes | No |
|--|-----------------------|-----------------------|
| a. a witness | <input type="radio"/> | <input type="radio"/> |
| b. a survivor or victim | <input type="radio"/> | <input type="radio"/> |
| c. a participant in cleanup, rescue, investigation, or aid (remote or on-site) | <input type="radio"/> | <input type="radio"/> |

95. Have you ever been exposed to combat or violence involving injuries or fatalities?

(Darken one circle on each line)

I have been exposed to combat or violence as:

- | | Yes | No |
|--|-----------------------|-----------------------|
| a. a witness | <input type="radio"/> | <input type="radio"/> |
| b. a survivor or victim | <input type="radio"/> | <input type="radio"/> |
| c. a participant in cleanup, rescue, investigation, or aid (remote or on-site) | <input type="radio"/> | <input type="radio"/> |
| d. someone who has used deadly force in combat | <input type="radio"/> | <input type="radio"/> |

96. Have you ever witnessed or been exposed to a major accident involving injuries or fatalities?

(Darken one circle on each line)

I have been exposed to a major accident as:

- | | Yes | No |
|--|-----------------------|-----------------------|
| a. a witness | <input type="radio"/> | <input type="radio"/> |
| b. a survivor or victim | <input type="radio"/> | <input type="radio"/> |
| c. a participant in cleanup, rescue, investigation, or aid (remote or on-site) | <input type="radio"/> | <input type="radio"/> |

Military Work

The following questions ask how you feel about your current military job.

97. How often are you bothered by each of the following in your military job?
(Darken one circle on each line)

Nearly all the time
 Rather often
 Sometimes
 Rarely
 Not at all

- a. Not having enough help and equipment to get the job done well
- b. Feeling you have too much responsibility for the work of others
- c. Thinking that you'll not be able to meet the conflicting demands of various people you work with
- d. Having to do or decide things where mistakes could be quite costly
- e. Not knowing just what the people you work with expect from you
- f. Thinking that the amount of work you have to do may interfere with how well it gets done

How often are you bothered by each of the following in your military job?

- g. Feeling that you have to do things on the job that are against your better judgment
- h. Feeling that your job tends to interfere with your family life
- i. Feeling unable to influence your immediate supervisor's decisions and his/her actions that affect you
- j. Having to deal with or satisfy too many different people
- k. Being asked to work overtime when you don't want to
- l. Feeling trapped in a job you don't like but can't change and can't get out of

98. Overall, how satisfied would you say you are with your current military job?

- Very dissatisfied
- Somewhat dissatisfied
- Somewhat satisfied
- Very satisfied

99. Knowing what you know now, if you had to decide all over again whether to serve in your current military job, what would you decide?

- Decide definitely not to serve in my current military job
- Have some second thoughts about serving in my current military job
- Decide without hesitation to serve in my current military job

100. In general, how well would you say that your current military job measures up to the sort of job you wanted when you took it?

- Measures up very much
- Measures up somewhat
- Doesn't measure up

101. If a good friend told you that he or she was interested in working in a job like your current military job, what would you tell him or her?

- Advise him/her against it
- Recommend it with some doubts
- Strongly recommend it

102. How sad or happy do you feel about your current military job?

Happy 1 2 3 4 5 6 Sad

DEPLOYMENT

Deployment occurs when you are alerted, activated, and processed for movement in support of "real world" military operations. Deployment does not include scheduled trainings (such as annual training).

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103. In the past 5 years, have you ever been prevented or deferred from deploying for any of the following reasons:

- Never been deployed in the past 5 years [Go to question 112 at the top of the next page]
- Never been prevented from deploying in the past 5 years [Go to question 104]

I was not deployed because of:
(Darken one circle on each line)

- | | Yes | No |
|---|-----------------------|-----------------------|
| a. A pregnancy | <input type="radio"/> | <input type="radio"/> |
| b. A family situation | <input type="radio"/> | <input type="radio"/> |
| c. An injury | <input type="radio"/> | <input type="radio"/> |
| d. Dental work or dental problems | <input type="radio"/> | <input type="radio"/> |
| e. An abnormal Pap smear | <input type="radio"/> | <input type="radio"/> |
| f. A chronic illness (e.g., asthma, diabetes) | <input type="radio"/> | <input type="radio"/> |

104. Think about the last time you were deployed. Did you have orders to go someplace other than your usual duty location?

- Yes
- No
- Never been deployed

105. The last time you were deployed, how long were you away from your home for 24 hours or more?

- Less than 1 week
- At least 1 week, but less than 2 weeks
- At least 2 weeks, but less than 3 weeks
- At least 3 weeks, but less than 4 weeks
- At least 1 month, but less than 2 months
- At least 2 months, but less than 5 months
- At least 5 months, but less than 6 months
- At least 6 months, but less than 12 months
- At least 1 year, but less than 2 years
- At least 2 years, but less than 4 years
- More than 4 years
- Never been deployed

106. Think about the last time you were deployed.

Very satisfied
Satisfied
Dissatisfied
Very dissatisfied
Don't know

How satisfied were you with:

- a. The number of toilet facilities provided
- b. The number of hand washing facilities provided
- c. The number of shower facilities provided
- d. The amount of privacy available for personal hygiene
- e. The availability of health care services

107. Did you serve with the Military in any of the following areas?

(Darken one circle on each line)

- | | Yes | No |
|---|-----------------------|-----------------------|
| a. The Persian Gulf—Operations
Desert Shield or Desert Storm | <input type="radio"/> | <input type="radio"/> |
| b. Panama—Operation Just Cause | <input type="radio"/> | <input type="radio"/> |
| c. Somalia—Operation Restore Hope | <input type="radio"/> | <input type="radio"/> |
| d. Haiti—Operation Uphold Democracy | <input type="radio"/> | <input type="radio"/> |
| e. Bosnia—Operations Joint Endeavor or Joint Guard | <input type="radio"/> | <input type="radio"/> |
| f. Cuba—Operation Safe Haven | <input type="radio"/> | <input type="radio"/> |
| g. Other foreign areas | <input type="radio"/> | <input type="radio"/> |

108. While deployed during the following operations, how much of the time were you on foreign soil (do not include time aboard a ship)?

Nearly all the time
Rather often
Sometimes
Rarely
Not at all

I was on foreign soil during:

- a. The Persian Gulf—Operations
Desert Shield or Desert Storm
- b. Panama—Operation Just Cause
- c. Somalia—Operation Restore Hope
- d. Haiti—Operation Uphold Democracy
- e. Bosnia—Operations Joint Endeavor or Joint Guard
- f. Cuba—Operation Safe Haven
- g. Other foreign areas

If you are in the Guard or Reserve, "usual job" refers to your civilian job. If you are a student or homemaker, your work falls into the category of usual job.

109. The last time you were deployed, how much stress did you experience upon returning to your usual job?

- A great deal
- A fairly large amount
- Some
- A little
- None at all
- Never been deployed

110. The last time you were deployed, how much stress did you experience upon returning to your home?

- A great deal
- A fairly large amount
- Some
- A little
- None at all
- Did not leave home the last time I was deployed
- Never been deployed

111. During the past 12 months, have you been away from your home as part of your military service for at least 30 days in a row?

- Yes
- No

Occupational Health

112. During the past 30 days, have you been exposed to tobacco smoke for an hour or more a day?

- | | Yes | No |
|------------|-----------------------|-----------------------|
| a. At work | <input type="radio"/> | <input type="radio"/> |
| b. At home | <input type="radio"/> | <input type="radio"/> |

113. In your military job, how often are you/have you been exposed to the hazards listed below?

Most of the time
A moderate amount of the time
Some of the time
Rarely
Never
Don't know

I've been exposed to:

- | | | | | | | |
|---|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| a. Fibrous glass (fiberglass) | <input type="radio"/> |
| b. Asbestos | <input type="radio"/> |
| c. Coal dust or rock dust | <input type="radio"/> |
| d. Silica powder or sandblasting dust . . | <input type="radio"/> |
| e. Other specific dusts (wood, talc, lime) | <input type="radio"/> |
| f. Respiratory or skin irritants | <input type="radio"/> |
| g. Chemicals (acids, alkalis, solvents) . | <input type="radio"/> |
| h. Paint (oil-based thinner, scrapings, or sanding) | <input type="radio"/> |
| i. Metal fumes (from molten metal) . . . | <input type="radio"/> |
| j. Metal scrapings/filings | <input type="radio"/> |
| k. Welding fumes | <input type="radio"/> |
| l. Coal tar, pitch, asphalt | <input type="radio"/> |
| m. Engine exhaust (gasoline, diesel, or jet) | <input type="radio"/> |
| n. Fuels or motor oil | <input type="radio"/> |

I've been exposed to:

- | | | | | | | |
|--|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| o. Loud noise (e.g., jets) | <input type="radio"/> |
| p. Heavy lifting (over 25 lb) | <input type="radio"/> |
| q. X-rays | <input type="radio"/> |
| r. Radioactive materials (e.g., nuclear fuel, nuclear medicines) | <input type="radio"/> |
| s. Vibration (vibrating tools, motors) . . . | <input type="radio"/> |
| t. General shop dust | <input type="radio"/> |
| u. Pesticides, herbicides | <input type="radio"/> |
| v. Alcohol (industrial) | <input type="radio"/> |
| w. Medical waste (e.g., used hypodermic needles) | <input type="radio"/> |
| x. Adhesives | <input type="radio"/> |
| y. Explosives | <input type="radio"/> |
| z. Radar antenna or array (within 50 ft) . | <input type="radio"/> |
| aa. Transmitting antennas (within 50 ft) . | <input type="radio"/> |
| bb. Some other hazard | <input type="radio"/> |

114. Is protective gear available for you to use in your current military job? Examples of protective gear are gloves, respirator, filter, mask, rubber boots, ear plugs, film badge, hazardous materials suit, and fire fighting suit.

- Always
- Sometimes, but not always
- Never
- Don't need to wear protective gear (no contact with harmful substances)

115. In your military job, when you have contact with substances that might be harmful, how often do you use protective gear?

- Always
- Sometimes, but not always
- Never
- Don't need to wear protective gear (no contact with harmful substances)

116. In your military job, when you have contact with substances that might be harmful, which reasons for **NOT** wearing protective gear are true for you?

- Don't need to wear protective gear (No contact with harmful substances) [Read appropriate box at bottom of this page]

In my military job, I don't wear protective gear when:
(Darken one circle on each line)

- | | Yes | No |
|---------------------------------------|-----------------------|-----------------------|
| a. It doesn't work properly | <input type="radio"/> | <input type="radio"/> |
| b. It interferes with job performance | <input type="radio"/> | <input type="radio"/> |
| c. It is uncomfortable | <input type="radio"/> | <input type="radio"/> |
| d. I don't know how to use it | <input type="radio"/> | <input type="radio"/> |

If you are **MALE**: Please  here.
Place the questionnaire in the enclosed postage-free envelope and mail it. Thank you for your time and cooperation.

If you are **FEMALE**: We would appreciate it if you would take a few extra minutes to answer some additional questions about women's health issues. Please continue to the next page.

Women's Health Issues

This section asks questions about women's health issues, including stress, health care, and medical conditions.

1. In the **past 12 months**, how much stress did you experience because you are a woman in the Military?

- None at all
- A little
- Some
- A fairly large amount
- A great deal

2. During the **past 3 months**, did you have any of these conditions? (Include times you have had these conditions even if you didn't seek medical care.)

Have had a hysterectomy [Go to question 3]

In the past 3 months, I have had:

(Darken one circle on each line) Yes No

- a. Premenstrual symptoms or pain (PMS, premenstrual cramps)
- b. Cramps or pain during menstrual period requiring medication or time off from work
- c. Heavy periods (excessive menstrual flow)
- d. Light periods (hardly any menstrual flow)
- e. One missed period
- f. No menstrual periods for 2 or more months

In the past 3 months, I have had:

- g. A period that lasted longer than a week
- h. Too many periods (time between periods too short)
- i. Bleeding between periods
- j. Endometriosis
- k. Problem with uterus (womb) other than endometriosis

3. During the **past 3 months**, did you have any of these conditions? (Include times you have had these conditions even if you didn't seek medical care.)

(Darken one circle on each line)

- | | Yes | No |
|--|-----------------------|-----------------------|
| a. Discharge from breast | <input type="radio"/> | <input type="radio"/> |
| b. Breast lump | <input type="radio"/> | <input type="radio"/> |
| c. Yeast or vaginal infection | <input type="radio"/> | <input type="radio"/> |
| d. Vaginal rash, discharge, or other disorder except yeast infection or sexually transmitted disease | <input type="radio"/> | <input type="radio"/> |
| e. Abdominal pain (from known cysts) | <input type="radio"/> | <input type="radio"/> |
| f. Abdominal pain (from unknown cause) | <input type="radio"/> | <input type="radio"/> |

4. At what age did your menstrual cycles begin?

- Younger than 10 years old
- 10-12 years old
- 13-15 years old
- 16 years old or older
- Don't know

5. What is the total number of years you have taken birth control pills in your lifetime?

- 0 1 2 3 4 5 6 7 8 9 10 11 12

6. A Pap smear is when a health care provider inserts a swab into your vagina to scrape cells from the cervix. How long has it been since you had a Pap smear?

- Within the past year
- More than 1 year ago, but within the past 2 years
- More than 2 years ago, but within the past 3 years
- More than 3 years ago, but within the past 5 years
- More than 5 years ago
- Never
- Don't know

7. Have you ever had a Pap smear where the result was NOT normal?

- Yes
- No
- Don't know

8. If you have had Pap smear results that were NOT normal, have you had any of the following?

(Darken one circle on each line)

Because of a Pap smear that was NOT normal, I have had:	Yes	No	Never had an abnormal Pap
a. Additional tests	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
b. Surgery	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
c. Other treatment	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
d. More frequent Pap smears	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

9. A mammogram is an X-ray taken of your breasts by a machine that presses each breast (one at a time) between two paddles. When did you have your most recent mammogram?

- Within the past year
- More than 1 year ago, but within the past 2 years
- More than 2 years ago, but within the past 3 years
- 3 or more years ago
- Never
- Don't know

10. How often do you examine your breasts for lumps?

- Monthly
- Once every few months
- Rarely or never

11. About how long has it been since you had your breasts examined by a health care provider?
- Within the past year
 - More than 1 year ago, but within the past 2 years
 - More than 2 years ago, but within the past 3 years
 - 3 or more years ago
 - Never had breasts examined
 - Don't know
12. Have you received training from a medical provider on how to examine your own breasts?
- Yes
 - No
13. Have you ever had an operation to remove a breast lump that was found to be noncancerous?
- Yes
 - No
14. While stationed outside the continental United States, how easy or difficult has it been to receive the kind of OB/GYN care you would like?
- Very easy
 - Somewhat easy
 - Somewhat difficult
 - Very difficult
 - Never been stationed outside the continental United States
15. Have you had problems (such as infertility) getting pregnant?
- Yes
 - No
 - Never tried to get pregnant
16. When you are pregnant, do you feel you are given enough time off from your usual job to see an OB/GYN when necessary?
- Yes
 - No
 - Never been pregnant [Go to question 30, which is the last question on the next page]
17. If you have been pregnant in the past 12 months, did you know where to get information about risks to your pregnancy from your usual job?
- Yes
 - No
 - Have not been pregnant in the past 12 months
18. How many times have you been pregnant since joining the Military?
- 1 time
 - 2 times
 - 3 times
 - 4 or more times
 - Never been pregnant

19. Think about the times you've been pregnant since joining the Military. How many planned pregnancies have you had?
- 1 planned pregnancy
 - 2 planned pregnancies
 - 3 planned pregnancies
 - 4 or more planned pregnancies
 - Have had only unplanned pregnancies since joining the Military
 - Have had no pregnancies since joining the Military
20. Have you ever had a pregnancy to avoid deployment or to get to return early from deployment?
- Yes
 - No
21. How many live births have you had?
- 0 1 2 3 4 5 6 7 8 9 10 11+
22. How many premature babies have you had?
- 0 1 2 3 4 5 6 7 8 9 10 11+
23. How many of the babies that you have had weighed less than 5 pounds at birth?
- 0 1 2 3 4 5 6 7 8 9 10 11+
24. How old were you the first time you gave birth?
- Never been pregnant
- First, enter your age when your first child was born. Write ONE number in each box.
- Then, darken the matching circle below each box.
- | | |
|------|---|
| YRS. | |
| | |
| 0 | 0 |
| 1 | 1 |
| 2 | 2 |
| 3 | 3 |
| 4 | 4 |
| 5 | 5 |
| 6 | 6 |
| 7 | 7 |
| 8 | 8 |
| 9 | 9 |
25. To the best of your knowledge, when was the last time you were pregnant?
- Currently pregnant
 - May be pregnant now, but don't know for certain
 - Within the past year, but not now
 - More than 1 year ago, but within the past 2 years
 - More than 2 years ago, but within the past 3 years
 - More than 3 years ago, but within the past 4 years
 - More than 4 years ago, but within the past 5 years
 - More than 5 years ago
 - Never been pregnant

WOMEN'S HEALTH ISSUES

The next 4 questions refer to the last time you were pregnant. If you are currently pregnant, please answer for this pregnancy. "Pregnancy checkups" refer to checkups for weight, blood pressure, physical exams, procedures such as ultrasound, or other medical procedures related to pregnancy.

26. Think about your last pregnancy (or your current pregnancy). How long after you became pregnant did you have your first pregnancy checkup?

- Within the first 3 months after becoming pregnant
- 4-6 months after becoming pregnant
- More than 6 months after becoming pregnant
- Did not have any pregnancy checkups
- Have not had first checkup
- Never been pregnant

27. For your last pregnancy (or your current pregnancy), did you have any of the following?

- Never been pregnant

During my last pregnancy (or current), I had:

(Darken one circle on each line)

	Yes	No
a. Pregnancy complications that restricted my normal activities (e.g., high blood pressure, severe swelling, spotting, premature labor, diabetes)	<input type="radio"/>	<input type="radio"/>
b. An ectopic or "tubal" pregnancy	<input type="radio"/>	<input type="radio"/>
c. Childbirth problems (e.g., hemorrhaging, Caesarean section, induced labor)	<input type="radio"/>	<input type="radio"/>
d. A miscarriage or spontaneous abortion	<input type="radio"/>	<input type="radio"/>
e. Complications after childbirth that restricted my normal activities (e.g., infection, depression)	<input type="radio"/>	<input type="radio"/>

28. How many days were you unable to perform your military job because of an illness during your last pregnancy (or your current pregnancy)?

- Never been pregnant

• First, enter the number of days in the boxes. Use all three boxes. Write ONE number in each box.

• If you did NOT have an illness during your last (or current) pregnancy, please enter 000.

• If you had any illnesses during your last (or current) pregnancy, but none of them made you unable to perform your military job, please enter 000.

• Then, darken the matching circle below each box.

DAYS		
0	0	0
1	1	1
2	2	2
3	3	3
4	4	4
5	5	5
6	6	6
7	7	7
8	8	8
9	9	9

29. If you are in the Guard or Reserves, how many days were you unable to perform your usual job because of an illness during your last pregnancy (or your current pregnancy)?

- Active-duty personnel [Go to question 30]
- Never been pregnant [Go to question 30]

• First, enter the number of days in the boxes. Use all three boxes. Write ONE number in each box.

• If you did NOT have an illness during your last (or current) pregnancy, please enter 000.

• If you had any illnesses during your last (or current) pregnancy, but none of them made you unable to perform your military job, please enter 000.

• Then, darken the matching circle below each box.

DAYS		
0	0	0
1	1	1
2	2	2
3	3	3
4	4	4
5	5	5
6	6	6
7	7	7
8	8	8
9	9	9

30. During the past 30 days, have you taken replacement estrogens?

- Yes
- No

Thank you for the extra effort to complete these questions.

Place the questionnaire in the enclosed postage-free envelope and mail it.

Thank you for your time and cooperation.

OFFICER Job Category Examples (for Question 15)

(If you are enlisted, please turn this page over to find examples of enlisted job categories.)

CATEGORY	EXAMPLES
General Officer, Executive Officer, or Commanding Officer	Includes all officers of General or Flag rank, all Marine Corps full Colonels, and all directors, planners, or executives not classified elsewhere
Tactical Operations Officer	Includes pilots and aircraft crews, such as navigators; infantry, artillery, armor, and close support officers; Naval ship commanders; missile systems officers and missile unit commanders; and combat and operations officers
Intelligence Officer	Includes strategic, general, and communications intelligence officers, and counterintelligence officers
Engineering or Maintenance Officer	Includes civil engineers and architects; electrical and electronic engineers; communications engineers and communications officers; aircraft maintenance officers and aeronautical engineers; weapons engineering and maintenance officers; missile maintenance officers; ground, aviation, and weapons safety officers; chemical engineers; and topographic engineers, and cartographic and serial mapping officers
Scientist, Professional, or Staff Support (not involved in health care)	Includes chemists, biological scientists, physicists, geologists, meteorologists, social or behavioral scientists, lawyers, chaplains, mathematicians and statisticians, and military college faculty members
Health Care Provider	Includes physicians, dentists, nurses, veterinarians, allied health officers, and health services administration officers
Administrator or Operational Support	Includes general administrative officers, manpower and personnel managers, comptrollers and accounting officers, data processing officers, public and internal information officers, police, Inspector General and technical inspection positions, morale and welfare officers, and officers engaged in the planning, management, and operation of training programs
Supply, Procurement, or Allied Officer	Includes officers in supply, procurement and production, transportation, food service, and related logistical activities
Other	Includes law students, medical students, flight students, other trainees, and billet designators

ENLISTED Job Category Examples (for Question 15)

(If you are an officer, please turn this page over to find examples of officer job categories.)

CATEGORY	EXAMPLES
Infantry, Gun Crew, Air Crew or Seamanship Specialist	Individual weapons specialists, crew-served artillery specialists, armor and amphibious crew, air crew, specialists in combat engineering and seamanship, and installation security personnel
Electronic Equipment Repair Specialist	Specialists in the maintenance and repair of electronic equipment, such as radio, radar, sonar, navigation, weapons and computers
Communications or Intelligence Specialist	Specialists in the operation and monitoring of radio, radar, sonar, and gathering and interpretation of intelligence
Health Care Specialist/Technician	Specialists in patient care and treatment, medical support, and related medical and dental services
Other Technical or Allied Specialist	Specialists in skills not classified elsewhere, such as photography, mapmaking, weather, ordnance disposal, laboratory analysis, and music
Functional Support and Administration	General administrative, clerical, and professional specialists, including administrative specialists in data processing, functional support specialists (in areas such as supply, transportation, and flight operations), chaplains' assistants, and public affairs specialists
Electrical or Mechanical Equipment Repair Specialist	Specialists in the maintenance and repair of aircraft, automotive equipment, missile systems, marine engines and boilers, power-generating equipment, and other mechanical and electrical equipment
Craftsman	Metalworkers, construction workers, plumbers, electricians, heating and cooling specialists, lithographers, and other trades
Service and Supply Handler	Personnel in food service, operation of motor transport, shipping and receiving, law enforcement, laundry and dry cleaning
Other	Includes officer candidates, authorizations for personnel in a student status, or personnel serving in duties of a special or otherwise undesignated nature

APPENDIX B
RTI COVER LETTER

September 1998

Dear Member of the Armed Forces:

Research Triangle Institute of North Carolina, a nonprofit research organization, is conducting a research survey for the Department of Defense to provide a comprehensive assessment of health related issues for the Total Force, including Active Duty, Guard, and Reserve components. The study is called "Health Status of Military Women and Men in the Total Force" and its principal investigator is Dr. Robert M. Bray.

Your questionnaire will be one of a targeted 30,000 questionnaires completed by military personnel around the world. Your name was chosen at random from a list of officers and enlisted personnel to participate in this survey. Substitutions for selected personnel are **NOT** permitted. That is why you are so important to us. In a survey such as this, each person who participates represents thousands of other service personnel. For us to have useful results, it is very important that you provide complete and accurate responses to the questions asked, and the survey's success depends on everyone's willingness to take part. However, your participation is voluntary. Your decision on whether or not to participate will in no way affect health care benefits that you or your family receive or are entitled to.

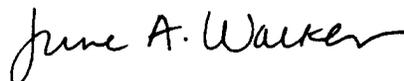
Because of the sensitive nature of the information in this survey, the importance of the study, and to encourage your frank and honest responses, we have arranged for you to mail your completed questionnaire directly to a civilian scoring contractor. Your name will never be associated with the responses you give and no military personnel will see your answers. **DO NOT** write your name or social security number on the questionnaire. Your questionnaire is anonymous and does not contain any personally identifying information.

Please complete the questionnaire in private and do not show it to anyone. Directions for marking your answer choices are given at the beginning of the questionnaire. Please read the instructions **carefully. USE ONLY A SOFT LEAD (NO. 2) PENCIL**; do not use a colored pencil or pen of any kind. We expect that the questionnaire will take from 45 minutes to an hour to complete. You are not required to answer any question to which you object.

When you have finished, seal the questionnaire in the enclosed envelope and mail it to our printing and scoring contractor, National Computer Systems, Hopkins, Minnesota. **NOTE:** Since this is a business reply envelope, no postage is required; however, you must place it in a U.S. Postal system box.

If you have any questions about this survey, you may call Dr. Robert Bray at 1-800-334-8571, extension 6433. If you have any questions about your rights as a research participant, you may call Dr. Steven Garfinkel at 1-800-334-8571, extension 6382. On behalf of Research Triangle Institute, I want to sincerely thank you for your participation in this important survey.

Sincerely,



June A. Walker
Data Collection Task Leader

Enclosure

APPENDIX C
MILITARY LETTERS OF SUPPORT



UNITED STATES MARINE CORPS

COMMANDER, MARINE FORCES RESERVE

4400 DAUPHINE STREET

NEW ORLEANS, LOUISIANA 70146-5400

04 SEP 1998

MEMORANDUM FOR SELECTED MARINE CORPS RESERVE MEMBERS

Subj: **HEALTH STATUS OF MILITARY WOMEN AND MEN**

The Health Status of Military Women and Men in the Selected Marine Corps Reserve is one of several large research efforts underway in the Department of Defense. The purpose of the study is to understand, care for, and improve the health status and physical condition of all service members. Readiness involves more than training and equipment. Fact is, we must all be healthy and fit in order to accomplish our mission.

This study, funded the Defense Women's Health Research Program, will survey over 30,000 men and women in all services, active and reserve. The survey will give us broad baseline information on a wide variety of health issues, risk factors, and the health care needs of our men and women in uniform. The results will allow us to better anticipate where resources are needed by helping to identify those military occupations or components at the greatest risk for developing health problems. Finally, the study will suggest areas where health promotion and other interventions can be targeted to improve the health and fitness of the active duty and reserve forces.

We urge you to complete and return the attached questionnaire. Your responses will be sent to the Research Triangle Institute (RTI), a civilian institute conducting the study. The accompanying letter from RTI lists points of contact, has important information about the confidentiality of your responses, and gives you some guidance for completing the survey. Thank you for your support of this important research effort.

John C. Weed
Rear Admiral
United States Naval Reserve
Force Surgeon

David M. Mize
Major General
United States Marine Corps
Commander



DEPARTMENT OF THE ARMY
OFFICE OF THE SURGEON GENERAL
5109 LEESBURG PIKE
FALLS CHURCH, VA 22041-3258



REPLY TO
ATTENTION OF

DASG-ZA

27 FEB 1998

MEMORANDUM FOR United States Army Service Member

SUBJECT: Total Force Assessment Survey

1. The enclosed *Health Status of Military Women and Men in the Total Force Survey* is focused on evaluating the health status of the active duty personnel, National Guard and Reserve forces. This survey is intended to provide the Army with a snapshot look at its overall health posture. As we already know, health impacts the readiness of our soldiers.
2. This survey is designed to target a wide range of health problems, risk behaviors, health care needs and practices. As a result, its findings will suggest target areas for health promotion interventions.
3. The United States Army fully supports this research initiative and urges you to participate by completing and returning the enclosed survey questionnaire. Rest assured, your responses will be completely anonymous.
4. Thank you for supporting this important research effort.

Encl


RONALD R. BLANCK
Lieutenant General
The Surgeon General



REPLY TO
ATTENTION OF

DEPARTMENT OF THE ARMY
OFFICE OF THE CHIEF, ARMY RESERVE
WASHINGTON, DC 20310-2400

07 AUG 1998

DAAR-ZA

MEMORANDUM FOR UNITED STATES ARMY RESERVE MEMBERS

SUBJECT: Health Status of Military Women and Men in the Total Force

1. The attached Health Status of Military Women and Men in the Total Force Survey is intended to provide the Army with a snapshot look at the overall health posture of the Force.
2. This survey is designed to target a wide range of health problems, risk behaviors, health care needs and practices. Findings will suggest target areas for health promotion inventions.
3. The United States Army Reserve fully supports this research initiative and urges your maximum participation in this valuable research effort. Your timely completion and return of the enclosed survey questionnaire is encouraged. Responses are anonymous.
4. Thank you for supporting this important research effort.

Encl

A handwritten signature in black ink, appearing to read "James R. Helmlly".

JAMES R. HELMLY
Brigadier General, U.S. Army
Deputy Chief, Army Reserve



DEPARTMENTS OF THE ARMY AND THE AIR FORCE
NATIONAL GUARD BUREAU
2500 ARMY PENTAGON
WASHINGTON, D.C. 20310-2500

NGB-ARS (600)

2 September 1998

MEMORANDUM FOR ARMY NATIONAL GUARD MEMBERS

SUBJECT: Health Status of Military Women and Men in the Total Force Survey

1. The enclosed *Health Status of Military Women and Men in the Total Force* survey is focused on evaluating the health status of the Army personnel in all components. This survey is intended to provide the Army a snapshot assessment of its overall health posture.
2. This survey is a result of the Defense Women's Health Research Program established in FY94 by public law to address Congressional concerns about the lack of medical research and study of the medical problems related to female members of the armed forces. The U.S. Army Medical Research and Materiel Command contracted with Research Triangle Institute (RTI) to conduct a study of the Health Status of Military Women and Men in the Total Force. Appropriate research committees have approved the study. Working together, RTI and an advisory group representing all the services have developed the attached questionnaire.
3. This is the first time comprehensive data collection of this type has been attempted for the Army National Guard. From these data, a baseline will be developed to provide a better understanding of healthcare issues and needs of all of our members.
4. I urge you to take time from your busy schedule to complete the enclosed questionnaire to help improve the health of the Total Force.

FOR THE CHIEF, NATIONAL GUARD BUREAU:

A handwritten signature in black ink, appearing to read "Roger C. Schult".

ROGER C. SCHULTZ
Major General, GS
Director, Army National Guard



DEPARTMENT OF THE NAVY

COMMANDER NAVAL RESERVE FORCE
NEW ORLEANS, LOUISIANA 70146-5000

IN REPLY REFER TO

6300

Ser N953E/8U569503

31 JUL 1988

From: Commander, Naval Reserve Force
To: Naval Reserve Member

Subj: HEALTH STATUS OF MILITARY WOMEN AND MEN IN TOTAL FORCE

Encl: (1) Health Status Survey

1. The *Health Status of Military Women and Men in Total Force Survey* focuses on evaluating the health status of active duty personnel, National Guard and Reserve forces. The purpose of the study is to identify and improve the health and fitness status of all service members which impacts the readiness of our Sailors.

2. This survey will supply broad baseline data on a wide range of health problems, risk behaviors, and health care needs of women and men in uniform. As a result, the findings will identify target areas for health promotion interventions. Finally, the study will allow us to anticipate the resource requirements needed to identify those military occupations at greater risk for developing health problems.

3. I urge you to complete and return enclosure (1). Research Triangle Institute (RTI), the civilian institution conducting the survey, has provided an accompanying letter which list points of contacts, important information about the confidentiality of your response, and gives you guidance for completing the survey.

4. Thank you for supporting this important research effort.

A handwritten signature in black ink, appearing to read "G. D. Vaughan".

G. D. VAUGHAN
Rear Admiral, U.S. Naval Reserve



DEPARTMENT OF THE AIR FORCE
HEADQUARTERS UNITED STATES AIR FORCE



MAY 2 8 1993

MEMORANDUM FOR AIR FORCE ACTIVE DUTY AND RESERVE MEMBERS

SUBJECT: Health Status of Military Women and Men in the Total Force

The Health Status of Military Women and Men in the Total Force is one of several large research efforts underway in the Department of Defense. The purpose of the study is to understand, care for, and improve the health status and physical condition of all service members. We all understand that readiness involves much more than training and equipment. The fact is, we must all be healthy and fit in order to get the job done.

This study, funded under the Defense Women's Health Research Program, will survey over 30,000 men and women in all four Services of the Total Force. The survey will give us broad baseline data on a wide range of health problems, risk factors, and health care needs of women and men in uniform. The results will allow us to better anticipate where resources are needed by helping to identify those military occupations or components at greatest risk for developing health problems. Finally, the study will suggest areas where health promotion and other interventions can be targeted to improve the health and fitness of the active duty and reserve forces.

We urge you to complete and return the attached questionnaire. Your responses will be sent to the Research Triangle Institute (RTI), the civilian institution conducting the study. The accompanying letter from RTI lists points of contact, has important information about the confidentiality of your responses, and gives you some guidance for completing the survey. Thank you for your support of this important research effort.


CHARLES H. ROADMAN II
Lieutenant General, USAF, MC
Surgeon General


ROBERT A. MCINTOSH
Major General, USAF
Chief of Air Force Reserve

Attachment:
RTI Letter and Questionnaire

APPENDIX D
PRESS RELEASE

Contacts:

Chuck Dasey, Public Affairs, U.S. Army Medical Research and Materiel Command.
301-619-2736, chuck_dasey@ftdetrick-ccmail.army.mil
Reid Maness, Communications Office, Research Triangle Institute.
919-541-7044, crm@rti.org

Survey Questionnaire Aims to Improve Health of Military Personnel

August 10, 1998 -- This Fall, more than 45,000 men and women in all Active, Guard, and Reserve military services are being asked to complete an extensive survey questionnaire about their health.

The information is essential for improving the health status and physical condition of all service members. And health, in turn, is a key component of readiness.

The survey's results will help anticipate where resources are needed. The results also will suggest areas where health promotion and other interventions can improve the health and fitness of active duty and reserve forces.

All branches of service want to improve health through steps such as reducing smoking, illnesses, and accidental injuries. These efforts, however, are hampered by a lack of information.

The survey, in fact, will be the first to provide comprehensive data on men's and women's health status for the Total Force, including personnel serving in the Active military and in Guard and Reserve components.

The key to the survey's success, though, is how many of the 45,000 people complete the questionnaire and send it in.

...more

Health of Military Personnel, page 2

“Every person who responds contributes to the quality of the data and the value it will have for improving the health services that are available to military personnel,” said Robert Bray, PhD, who is in charge of the study. “This truly is a case in which every voice counts.”

Dr. Bray works at Research Triangle Institute (RTI), a nonprofit organization that does independent research for both government and industry.

RTI will keep information about individuals strictly confidential. The Department of Defense will receive only the statistical results. This is important, because the survey asks many personal questions.

RTI has a long history of conducting surveys about sensitive personal topics and protecting individuals' privacy. For example, RTI has conducted six worldwide surveys of health behaviors among military personnel. RTI also is known for a landmark mental health study in the 1980s that resulted in increased benefits for veterans.

This new survey is sponsored by the Defense Women's Health Research Program, and its focus is on the total force, including both men and women.

Survey forms will go out in September, with at least two follow-up mailings at six-week intervals to people who have not responded.

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Research Triangle Institute is a nonprofit organization that conducts independent research in health, medicine, environmental protection, advanced technologies, and public policy. It was founded in 1958 by three universities in North Carolina (Duke, N.C. State University, and the University of North Carolina at Chapel Hill). More information about RTI is available at <http://www.rti.org>.

Note: survey respondents will include active duty personnel in the Army and the Air Force, as well as Reserve and Guard personnel in all forces. Active duty Navy and Marine Corps personnel already have responded to a similar survey.